

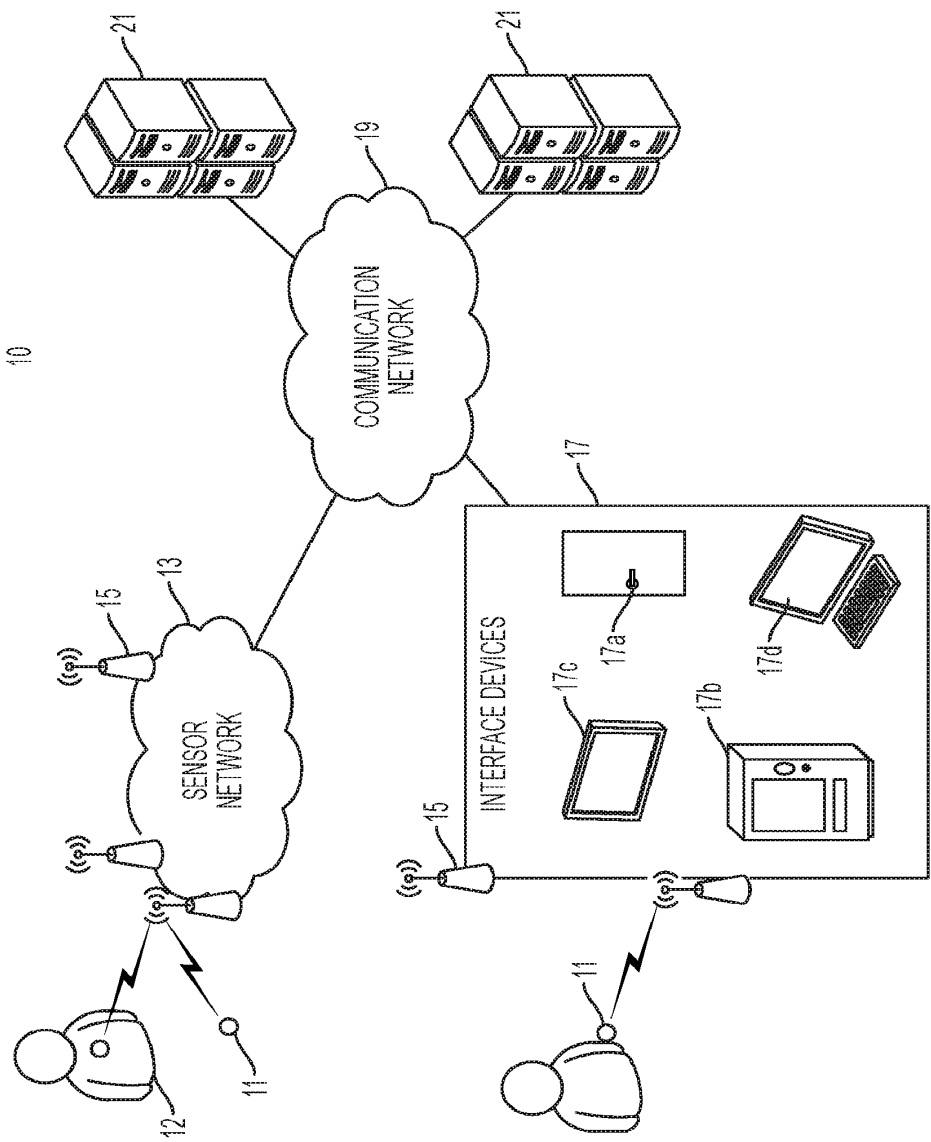


FIG. 1A

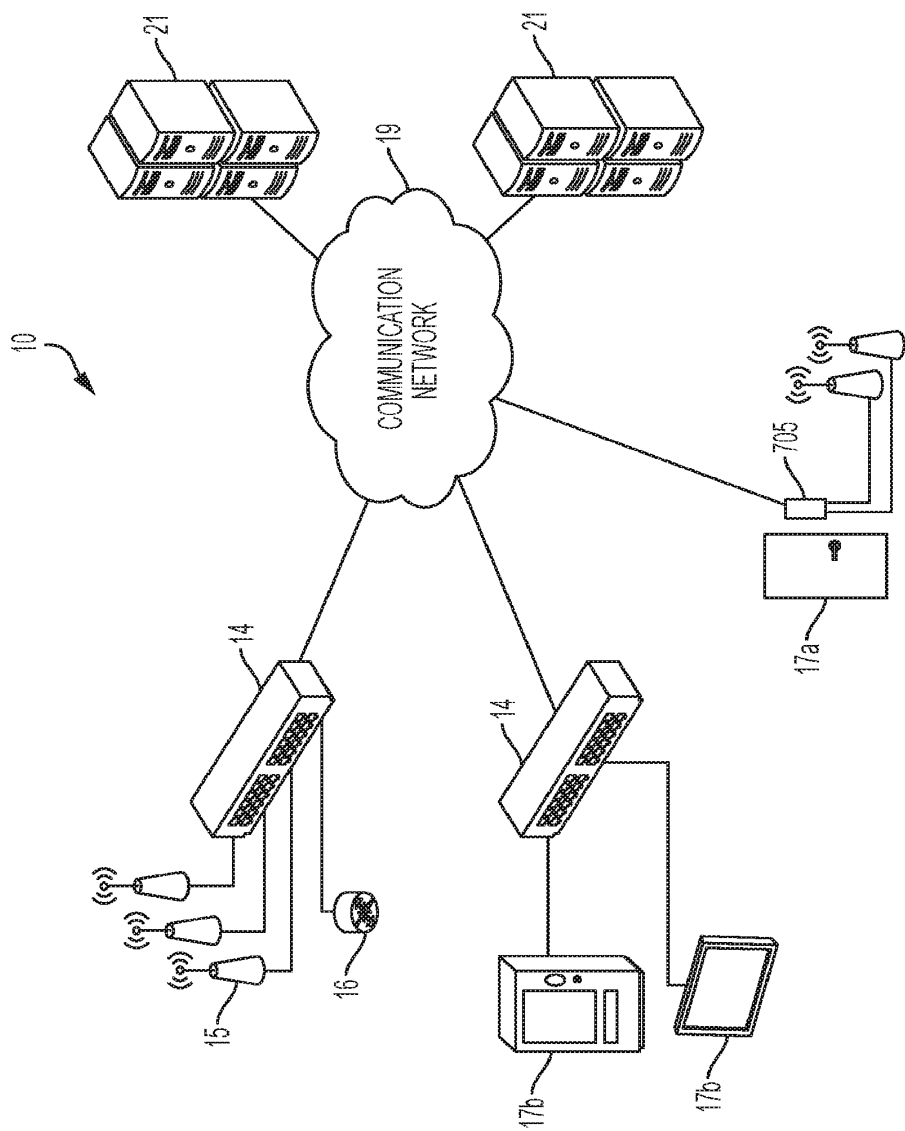


FIG. 1B

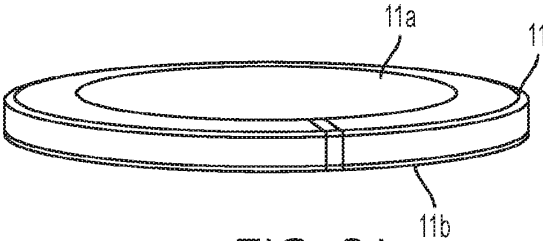


FIG. 2A

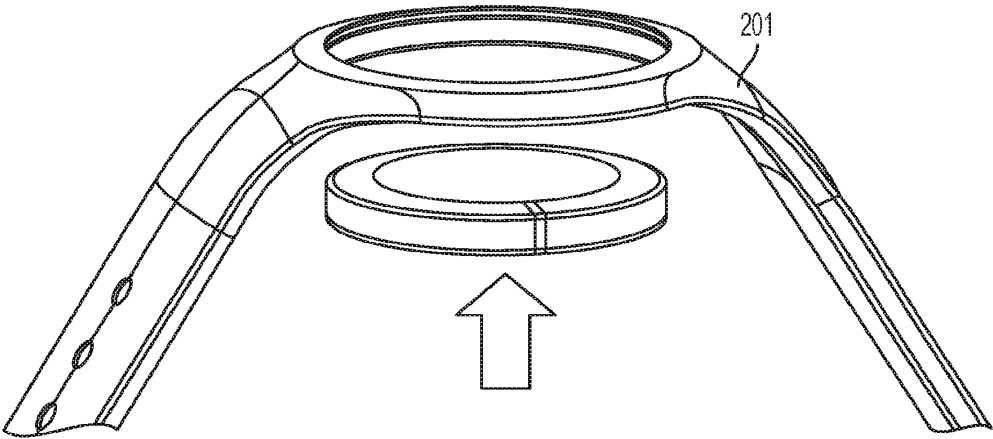


FIG. 2B

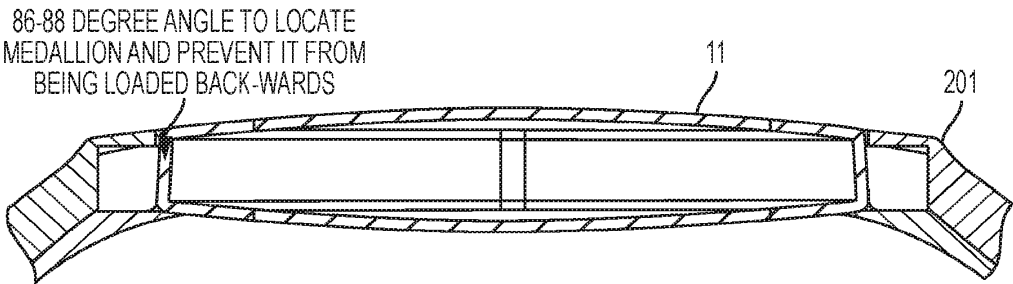


FIG. 2C

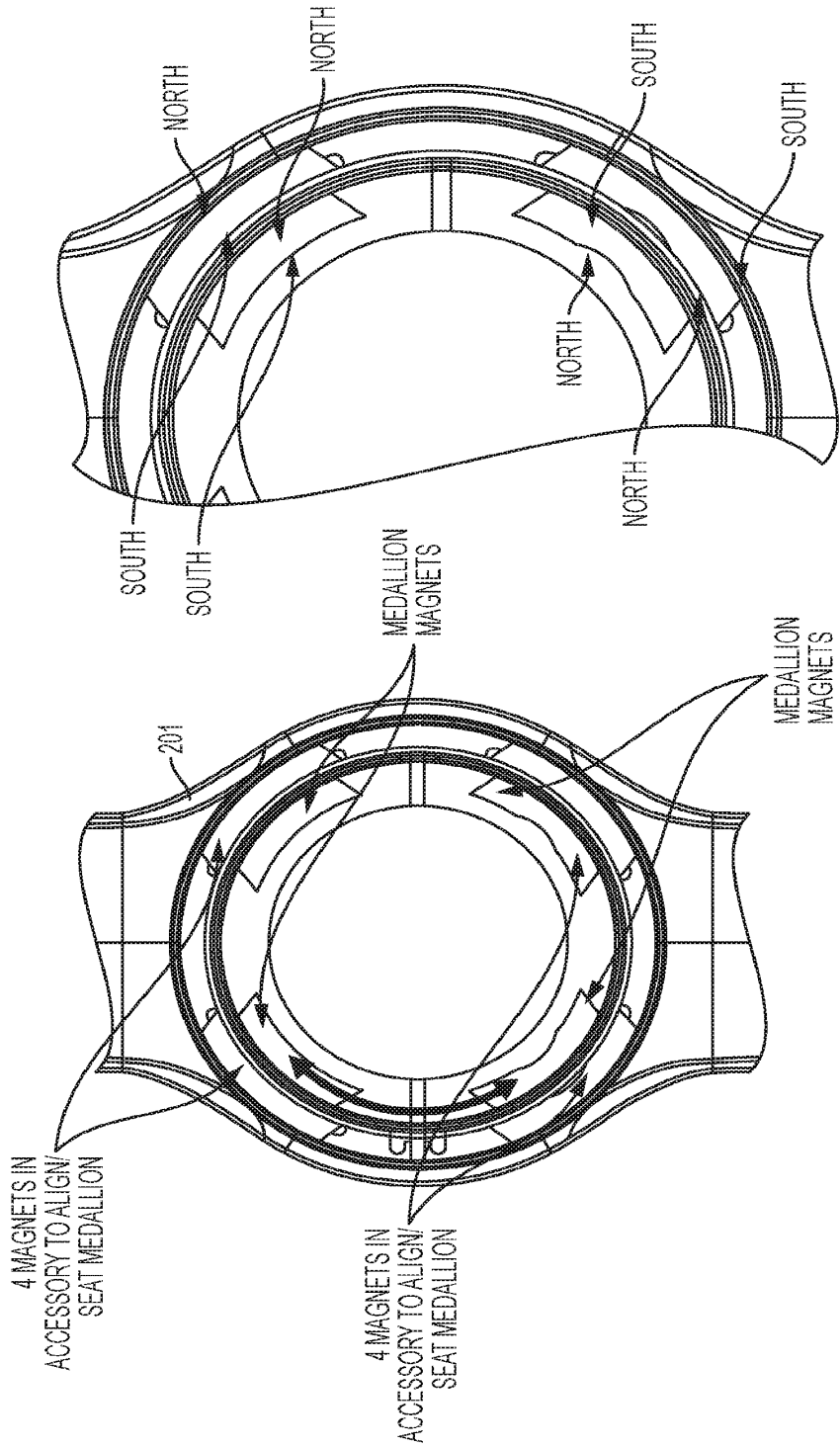


FIG. 2E

FIG. 2D

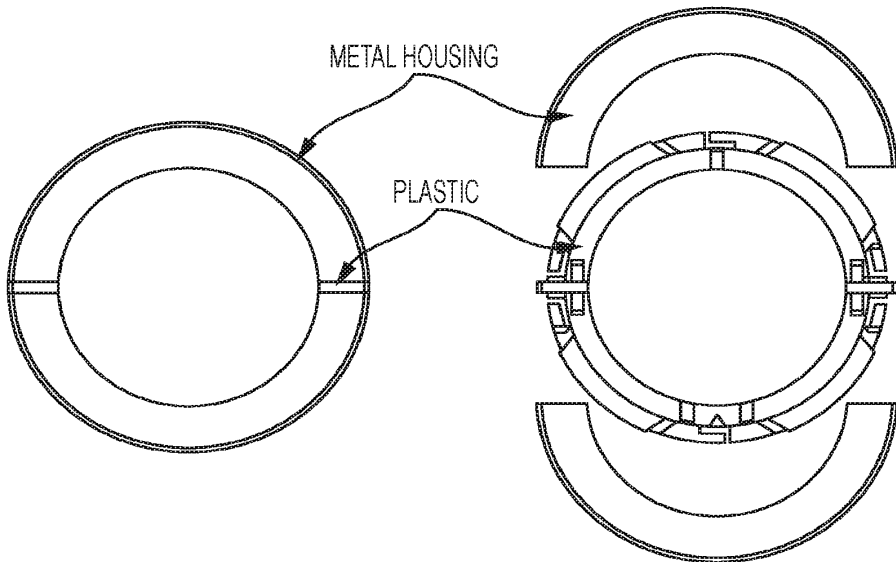


FIG. 3A

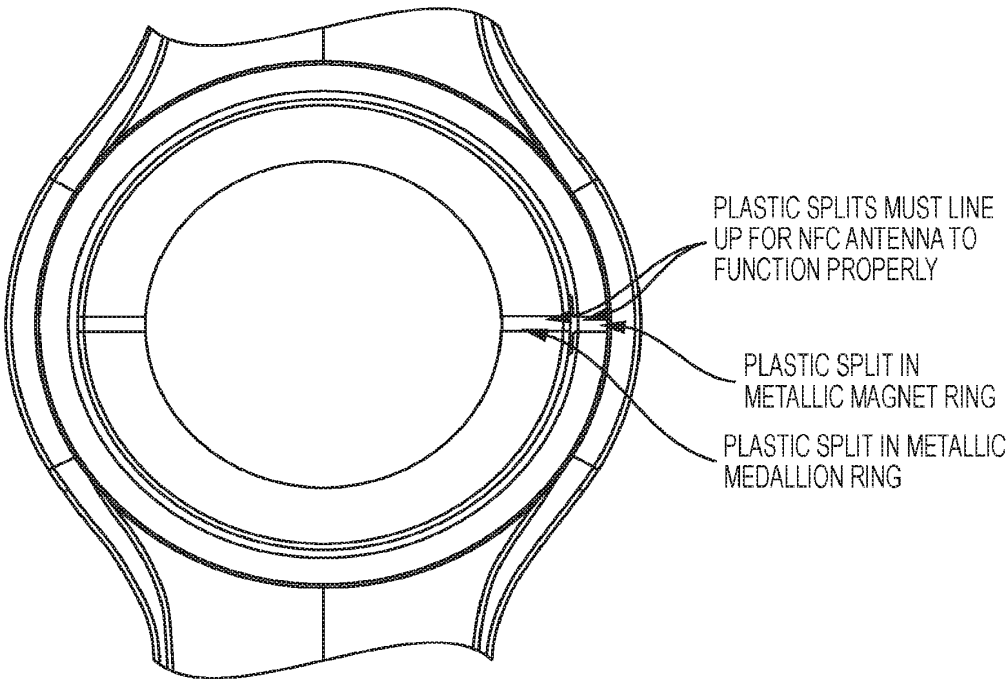


FIG. 3B

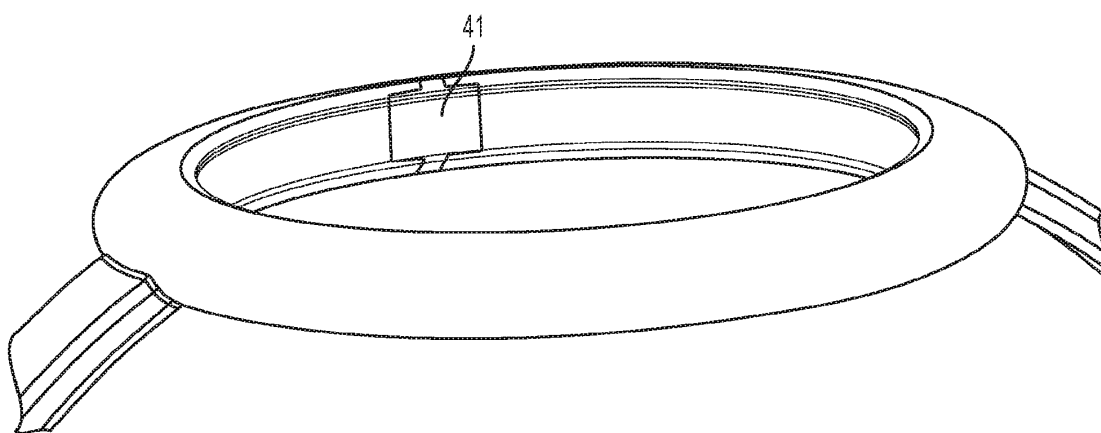


FIG. 3C

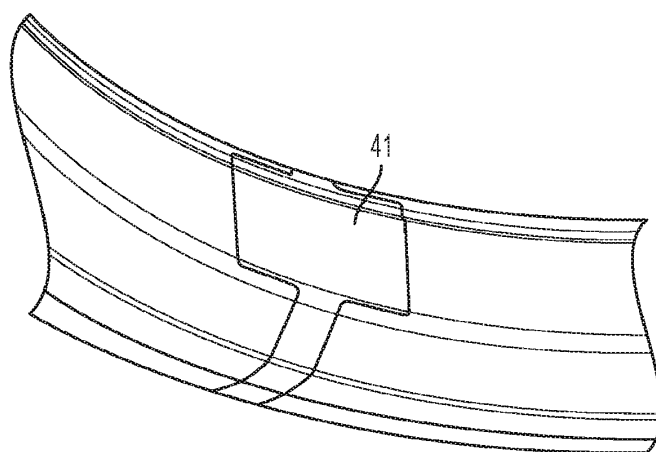


FIG. 3D

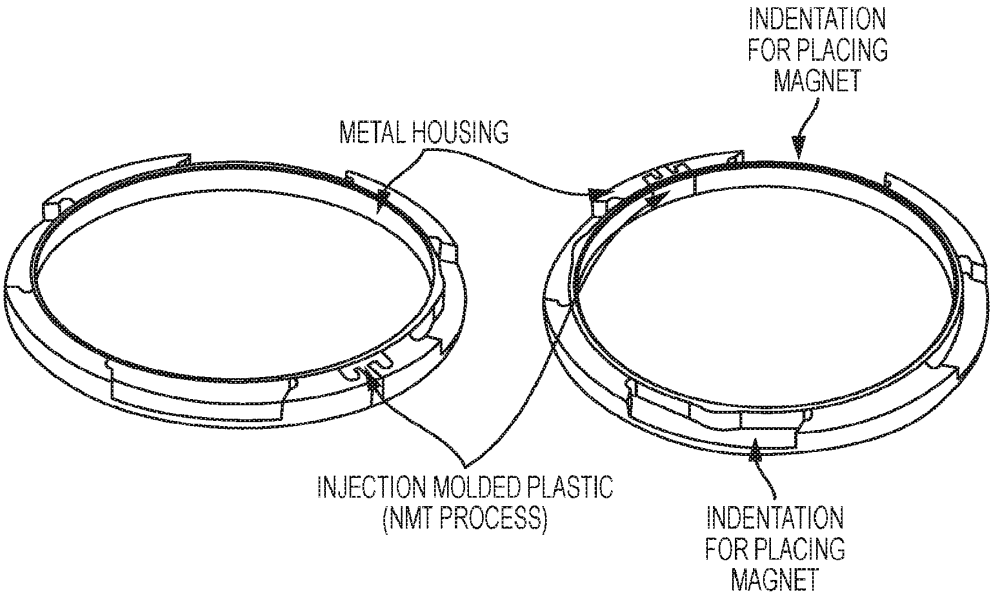


FIG. 3E

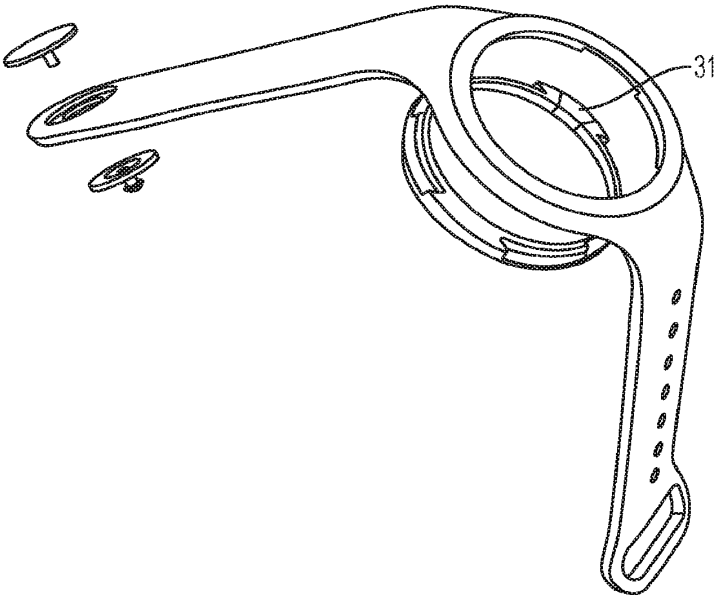


FIG. 4A

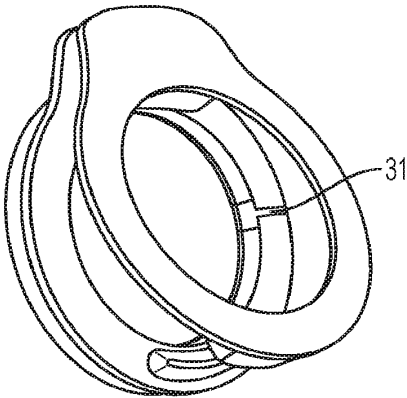


FIG. 4B

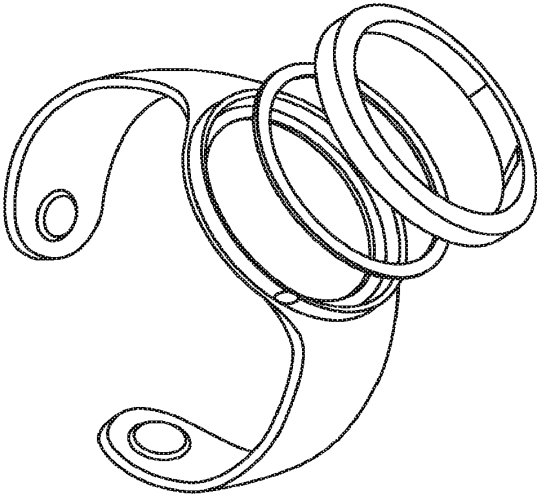


FIG. 4C

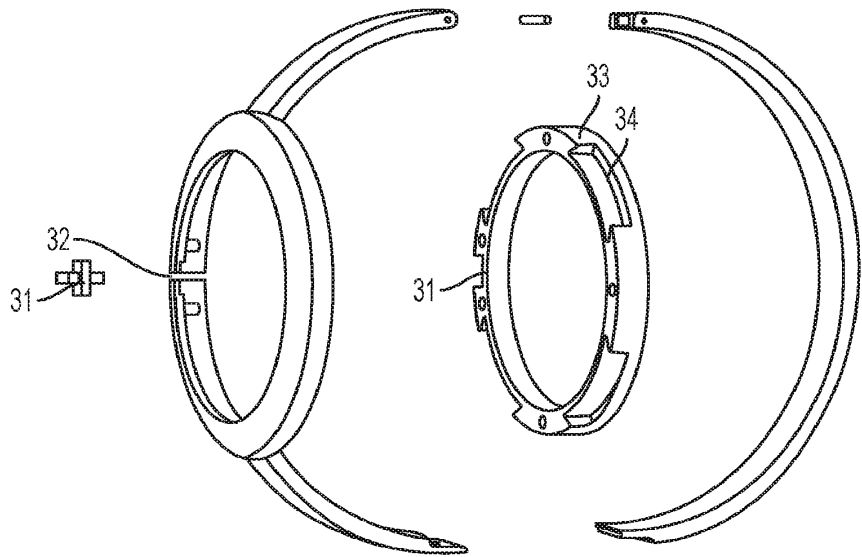


FIG. 4D

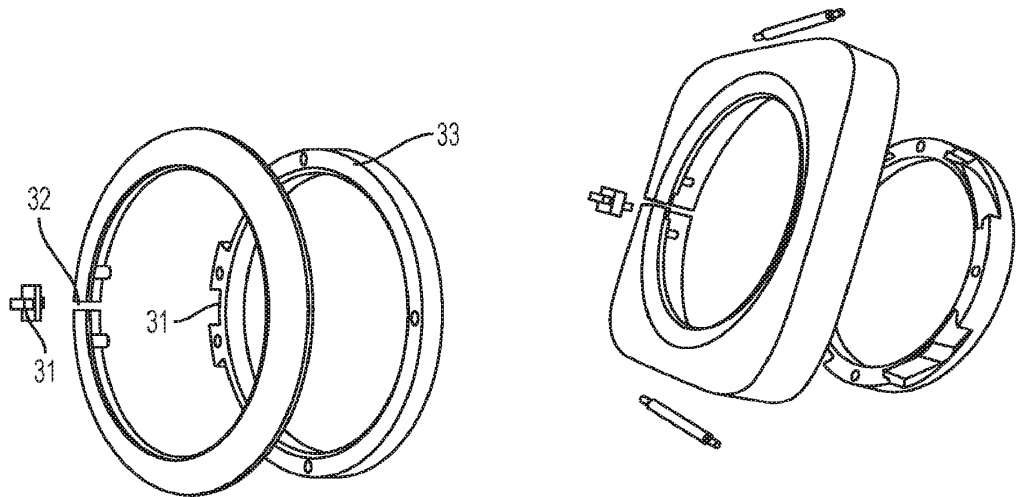


FIG. 4E

FIG. 4F

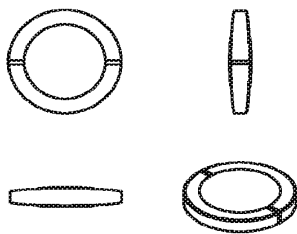


FIG. 5A

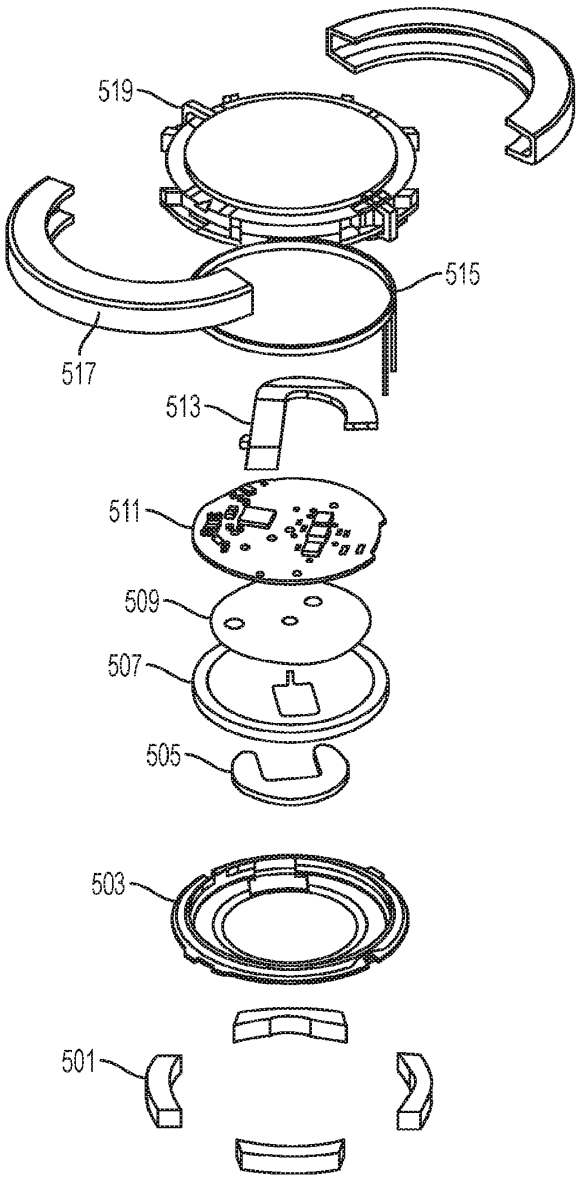


FIG. 5B

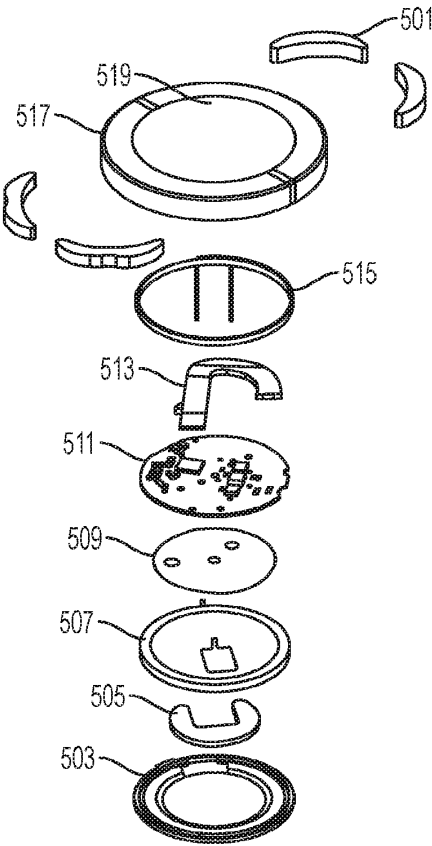


FIG. 5C

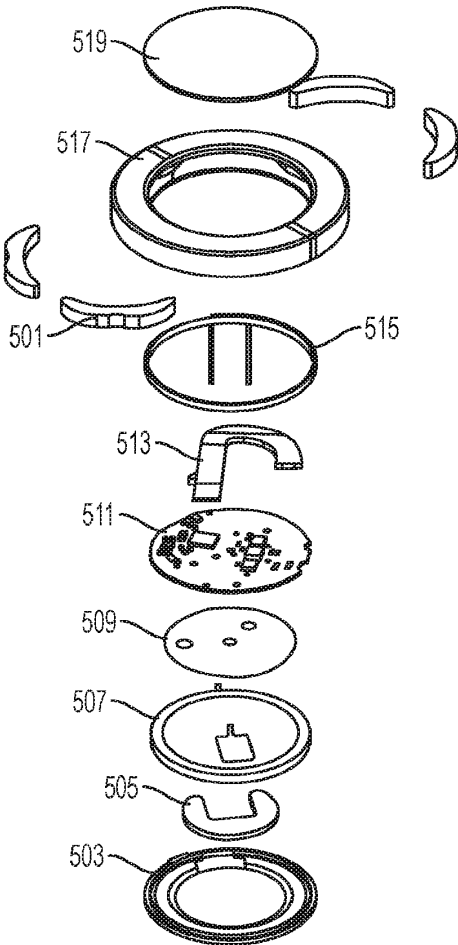


FIG. 5D

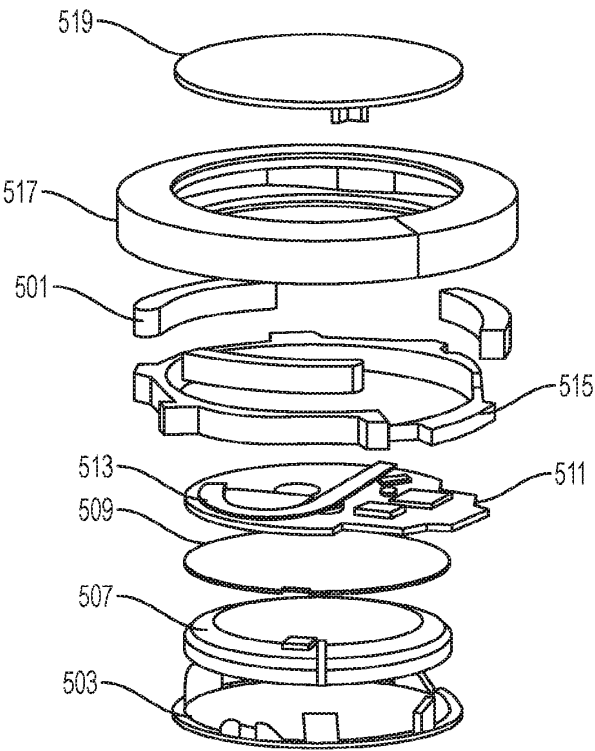


FIG. 5E

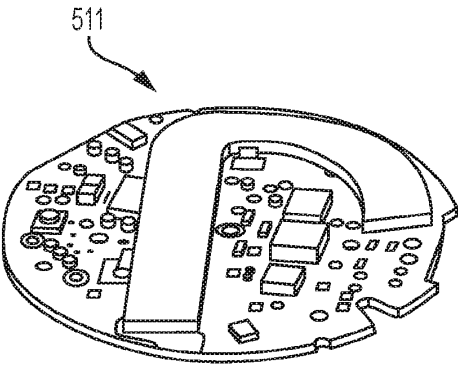


FIG. 5F

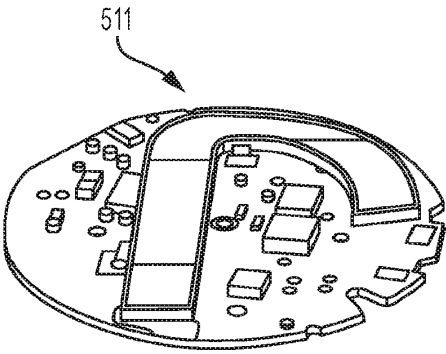


FIG. 5G

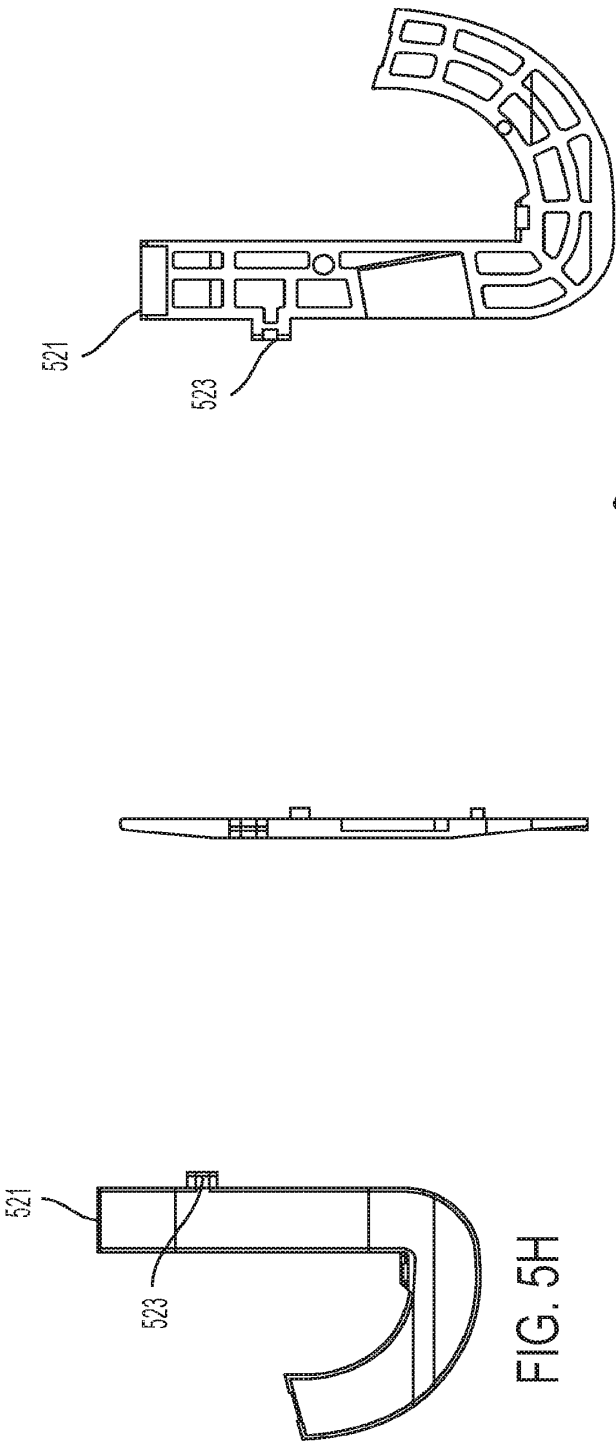


FIG. 5I

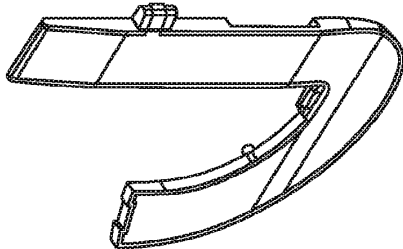
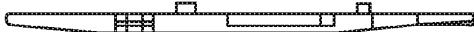


FIG. 5J

FIG. 5L



FIG. 5K

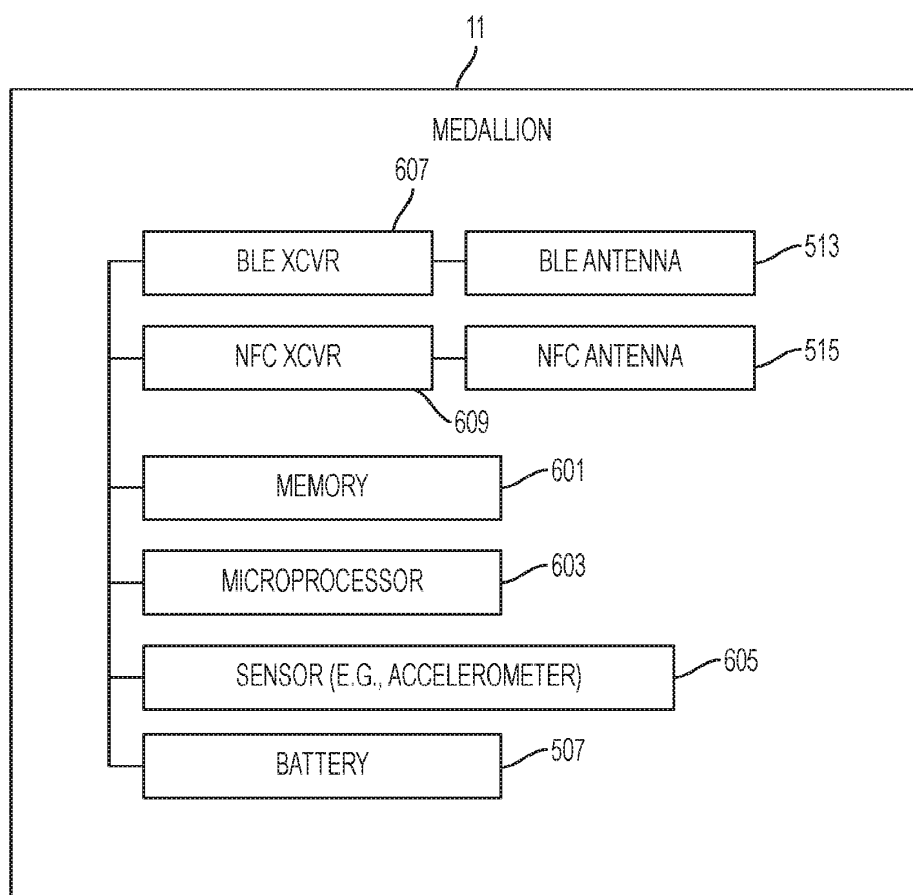


FIG. 6

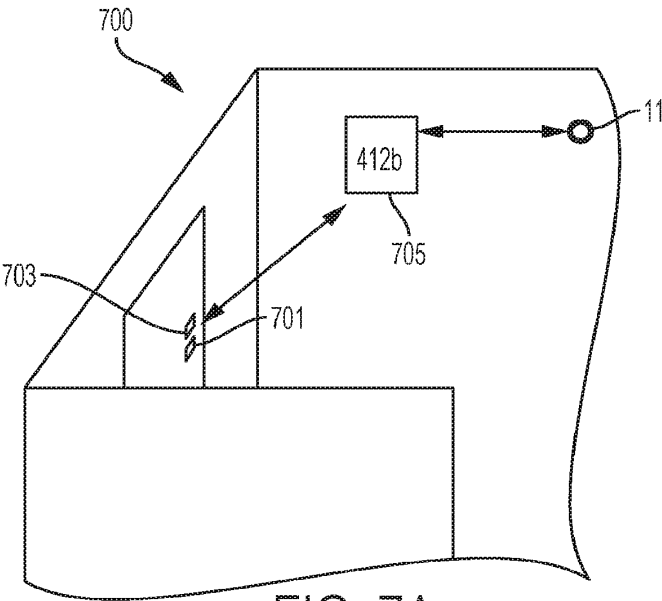


FIG. 7A

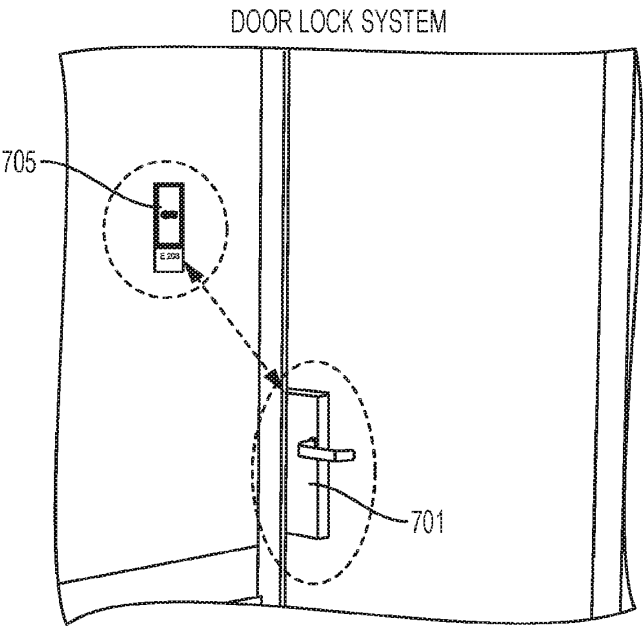


FIG. 7B

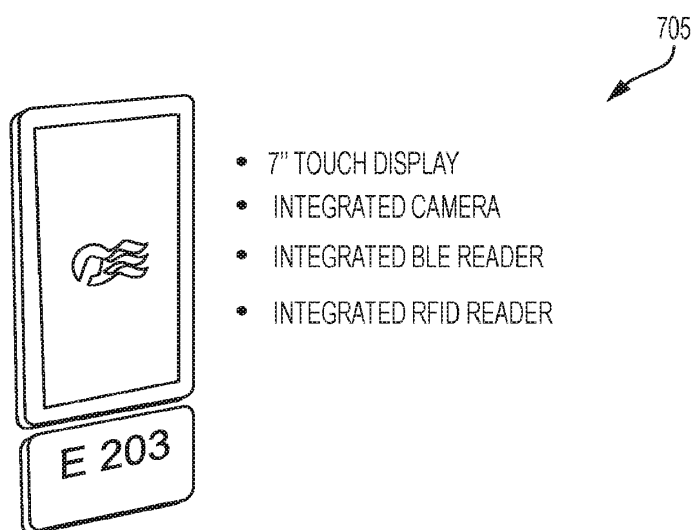


FIG. 7C

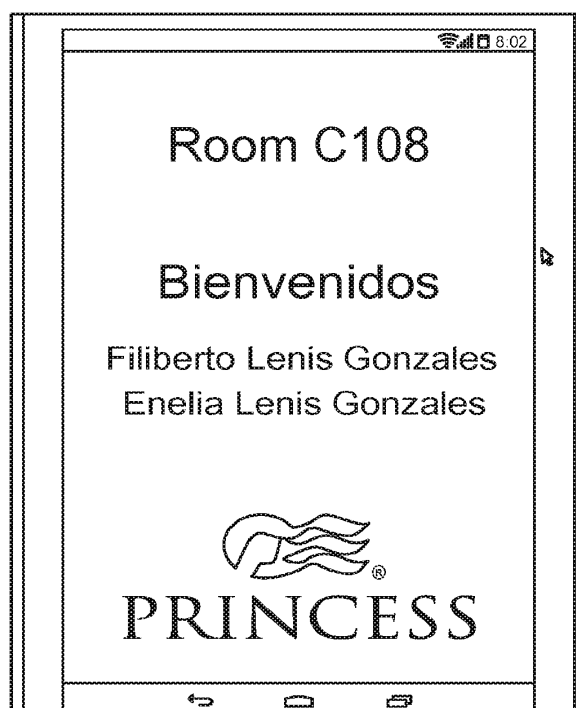


FIG. 7D

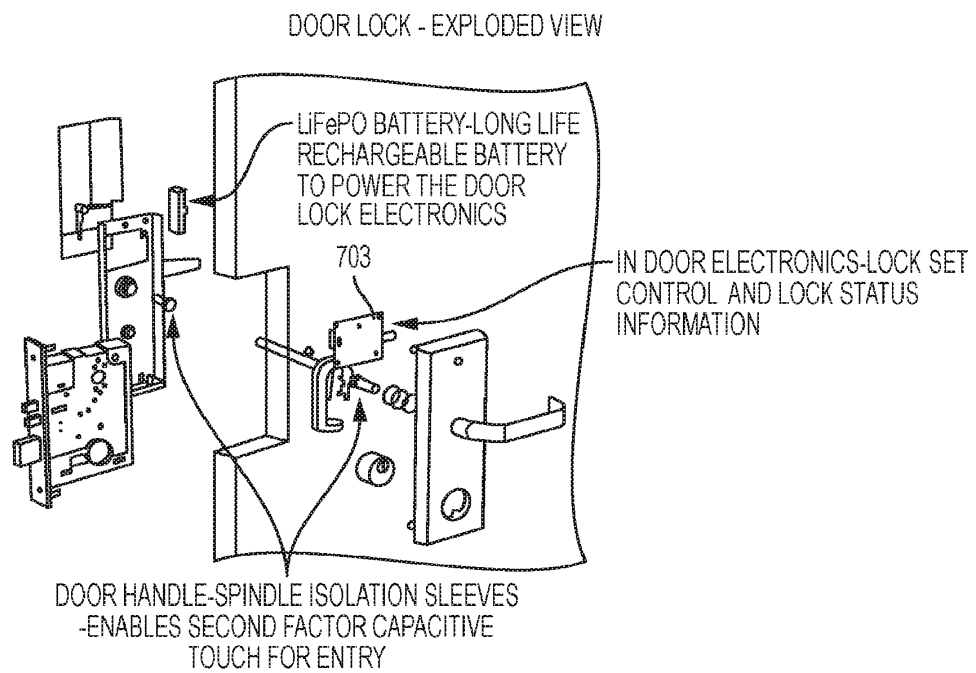


FIG. 7E

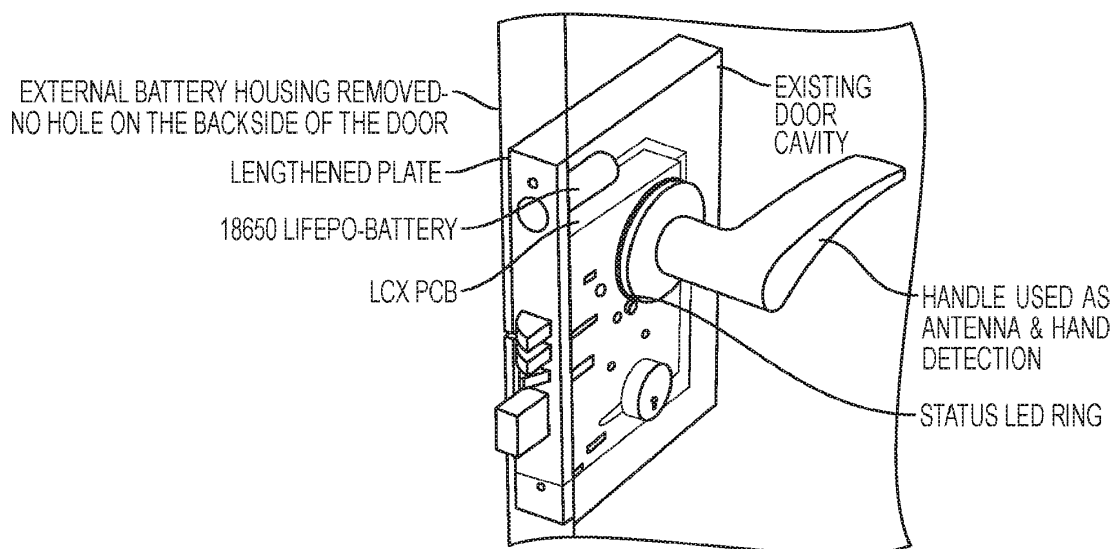


FIG. 7F

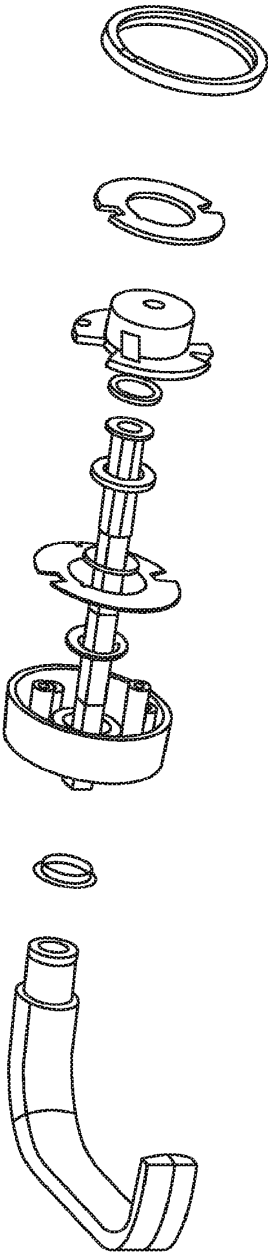


FIG. 7G

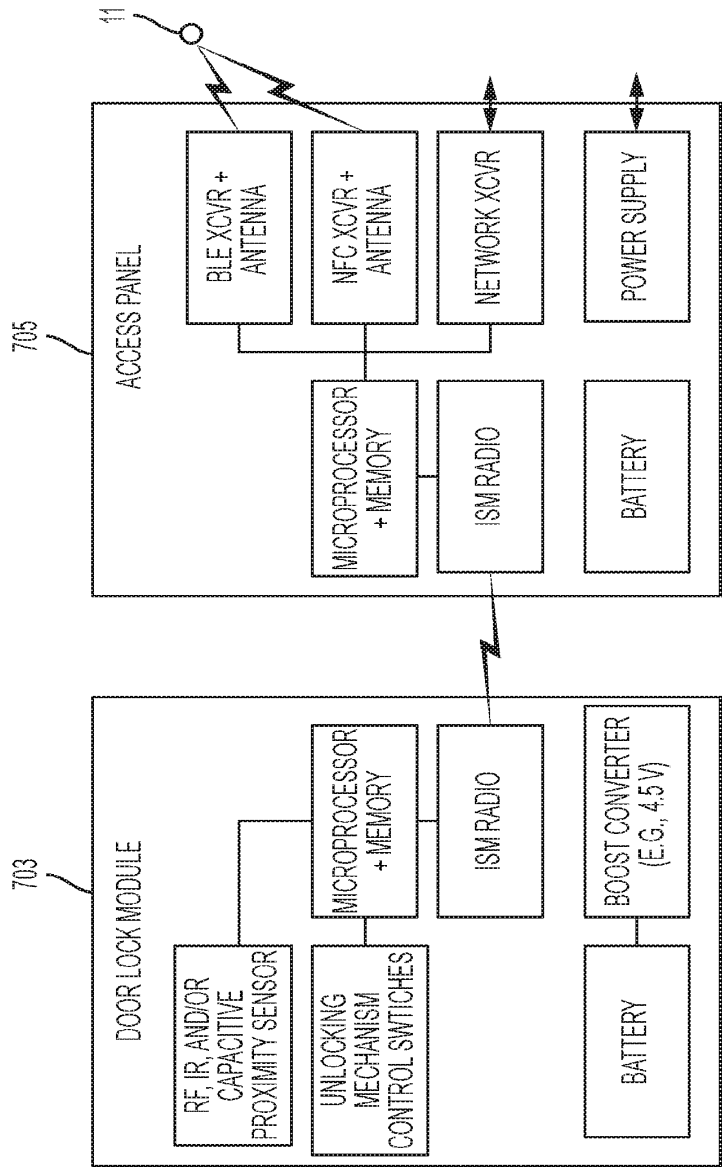


FIG. 7H

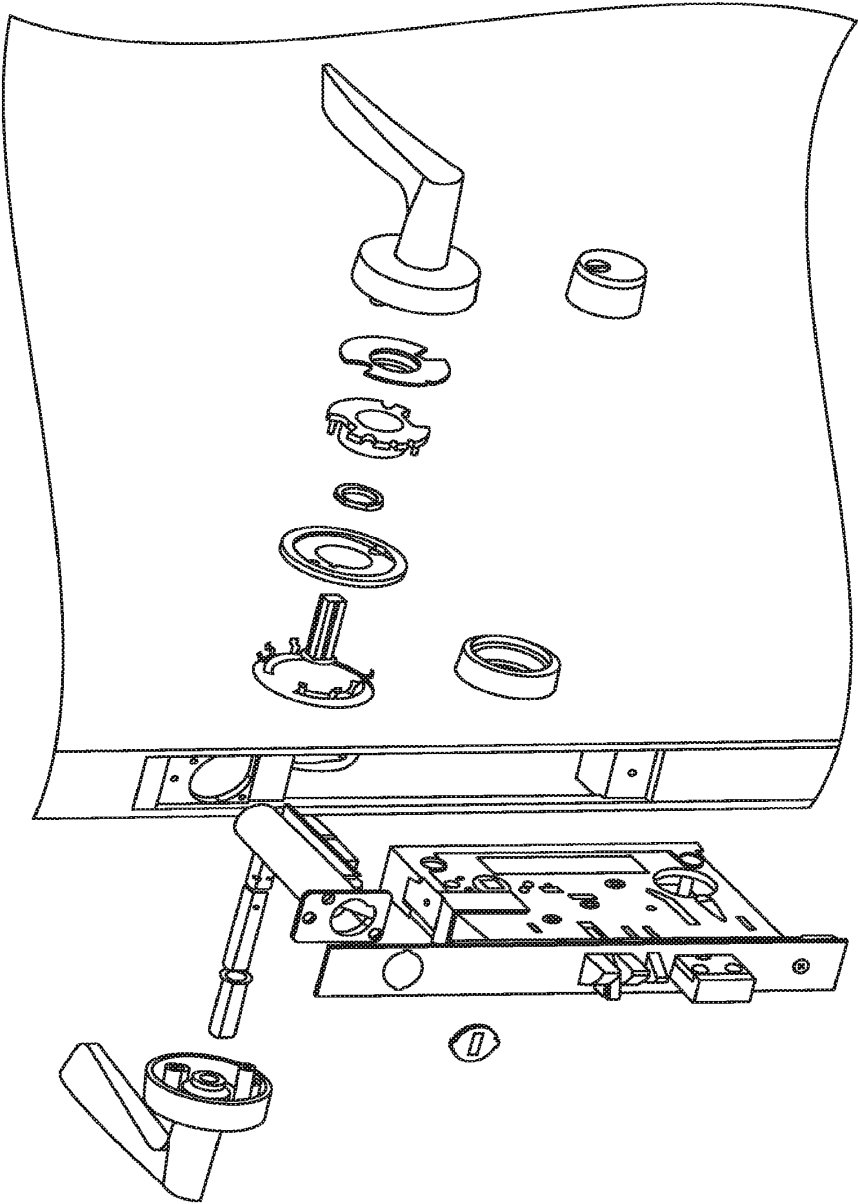


FIG. 7I

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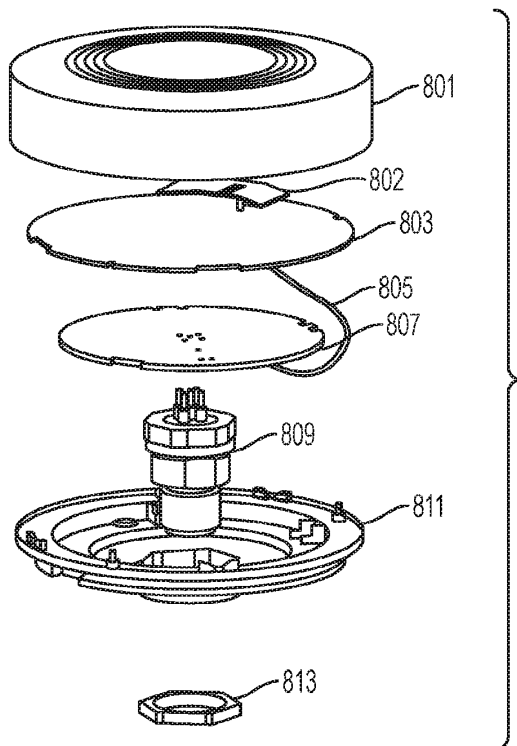


FIG. 8A

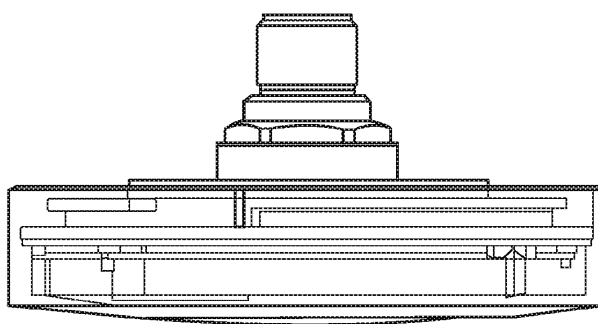


FIG. 8B

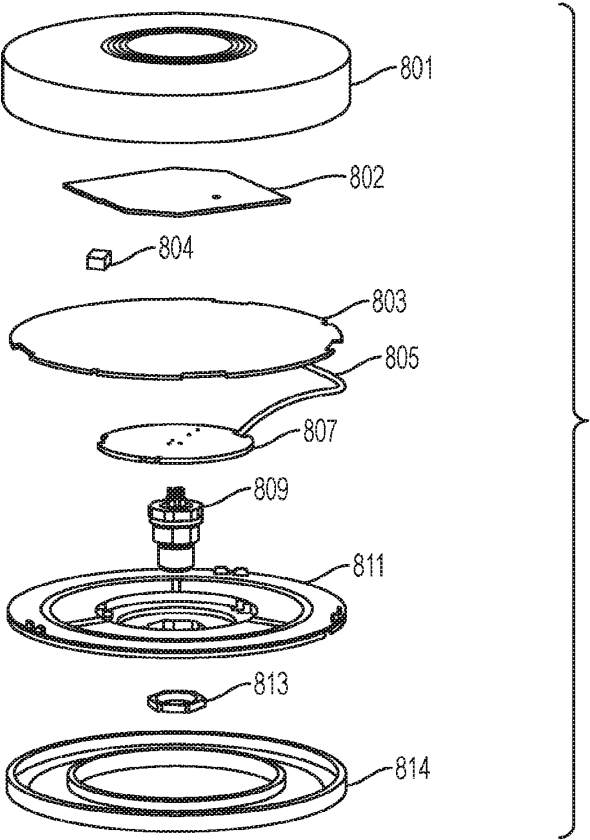


FIG. 8C

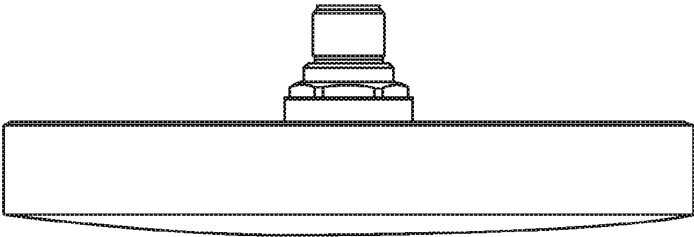


FIG. 8D

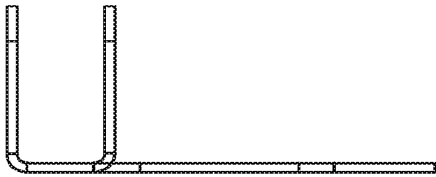


FIG. 8F

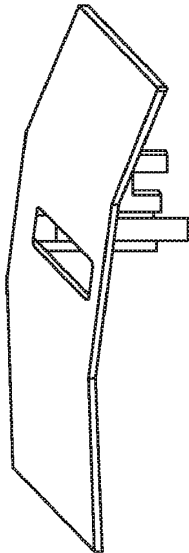


FIG. 8H

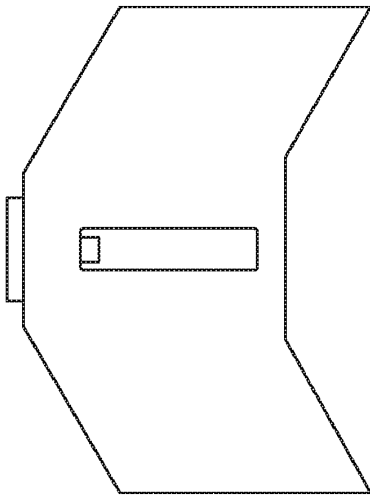


FIG. 8E

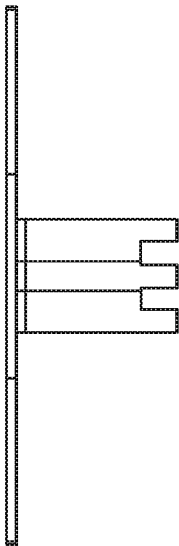


FIG. 8G



FIG. 8J

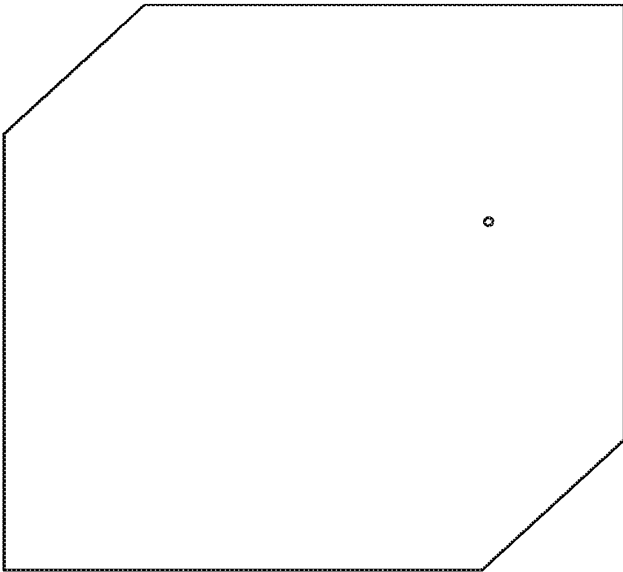


FIG. 8I

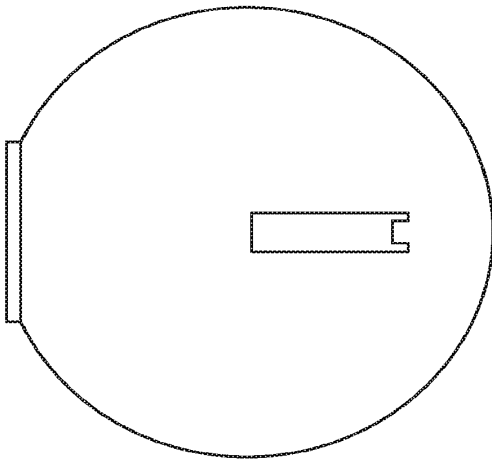


FIG. 8K



FIG. 8L

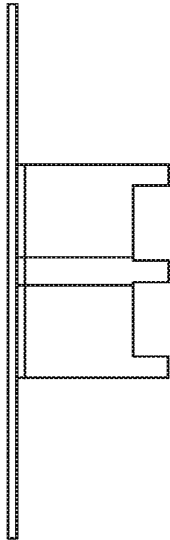


FIG. 8M

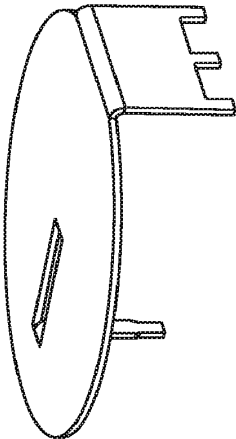


FIG. 8N

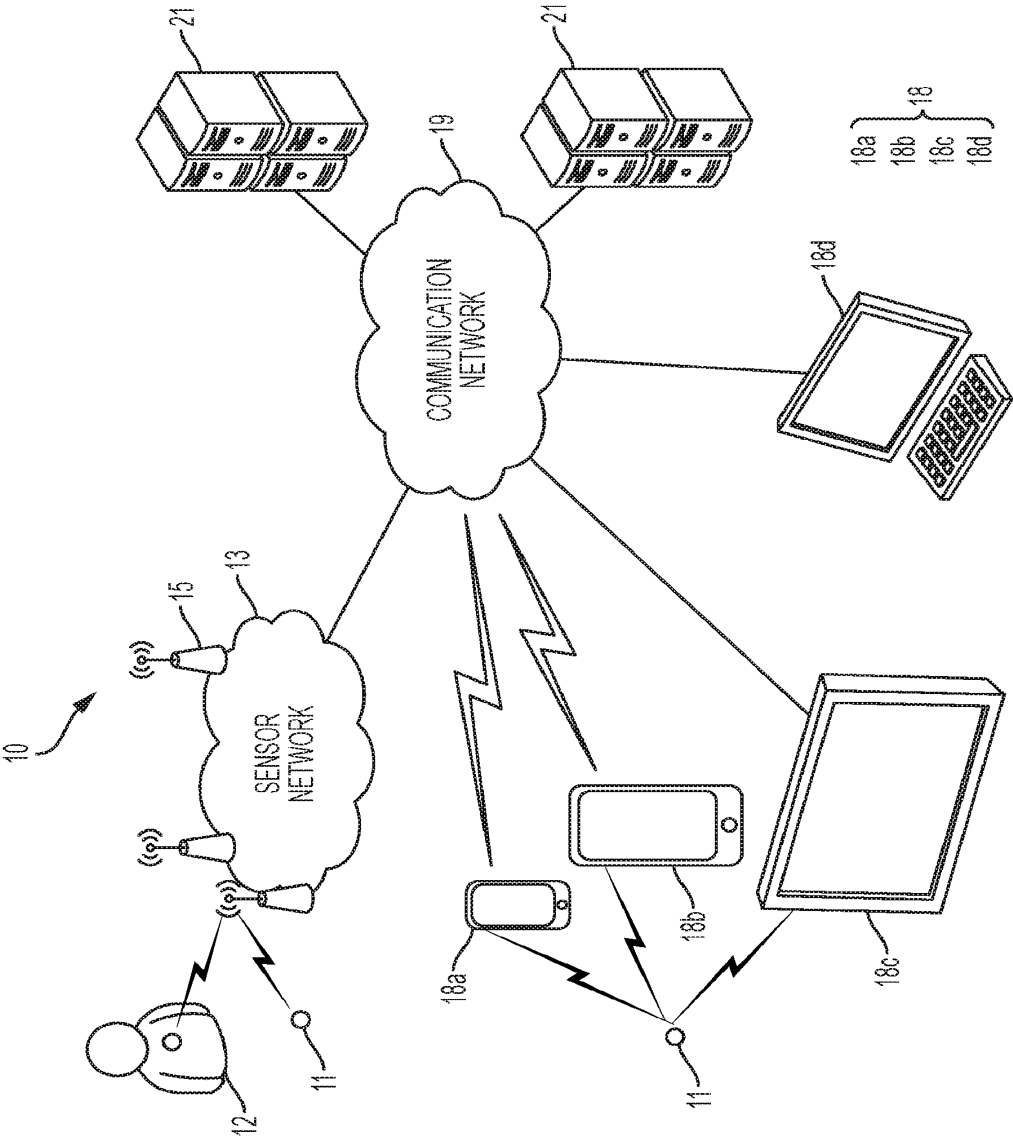


FIG. 9

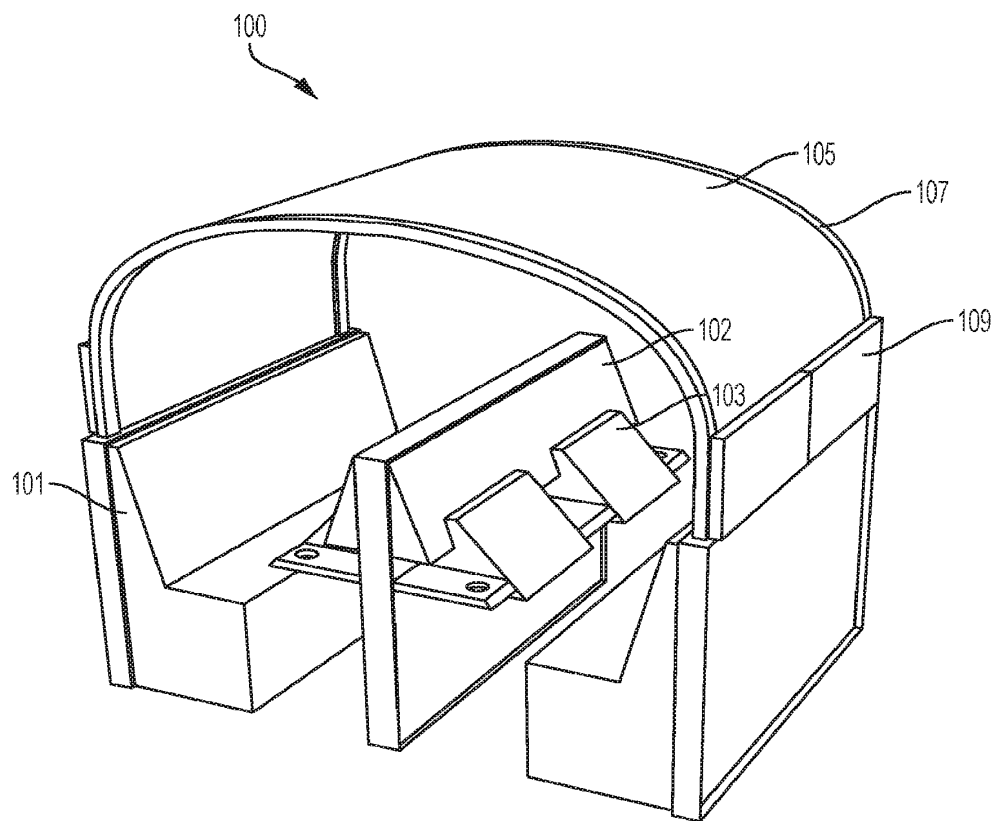


FIG. 10

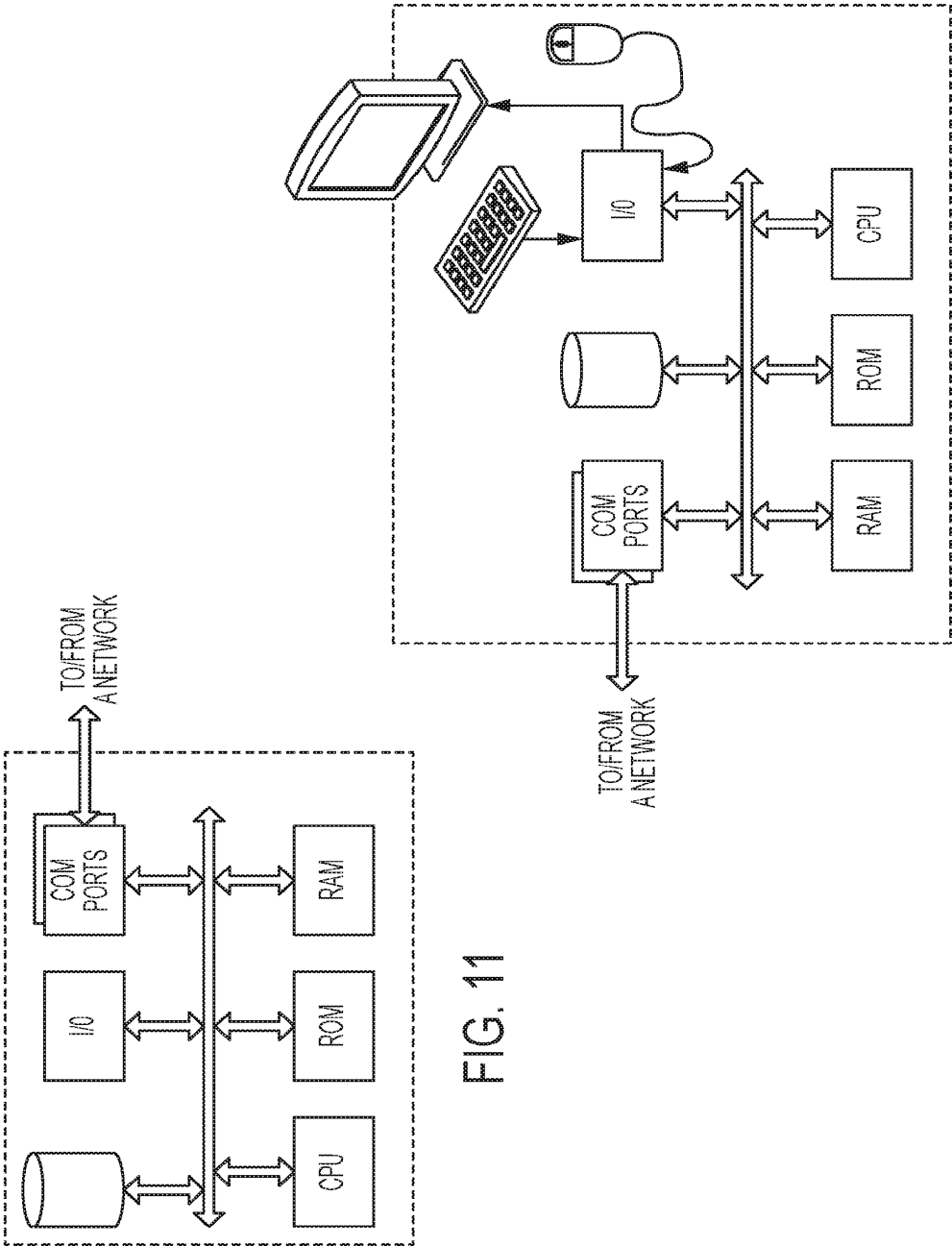


FIG. 11

FIG. 12

10

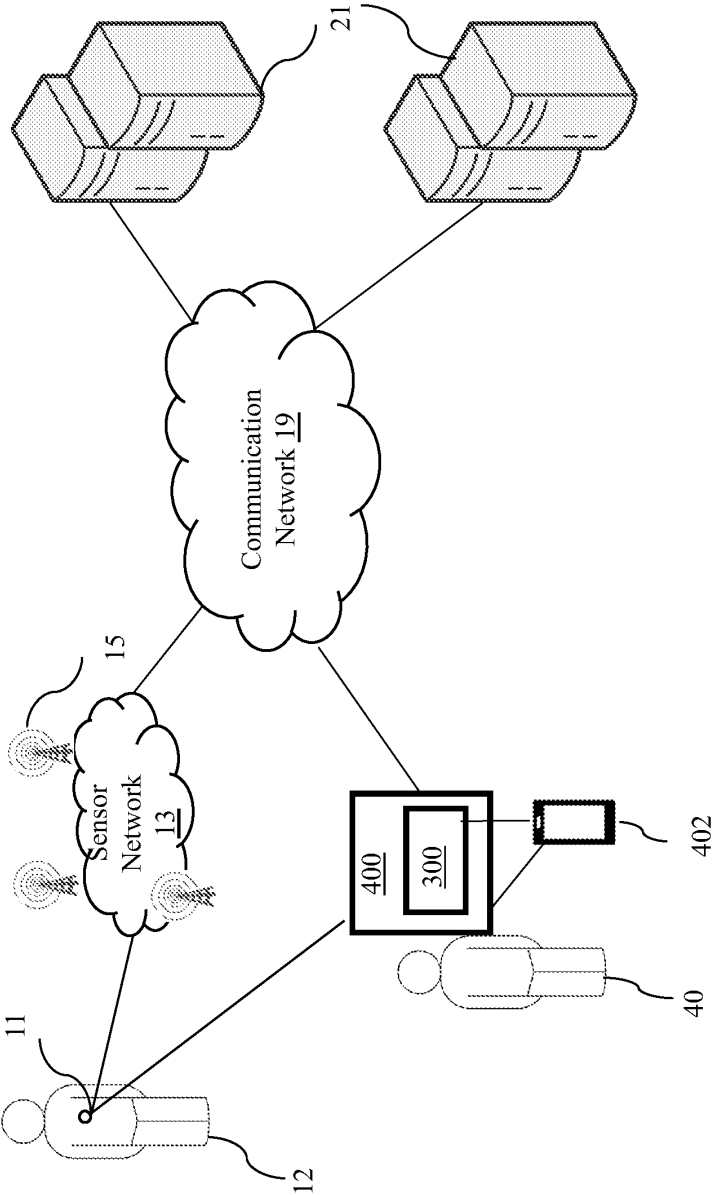


Fig. 13

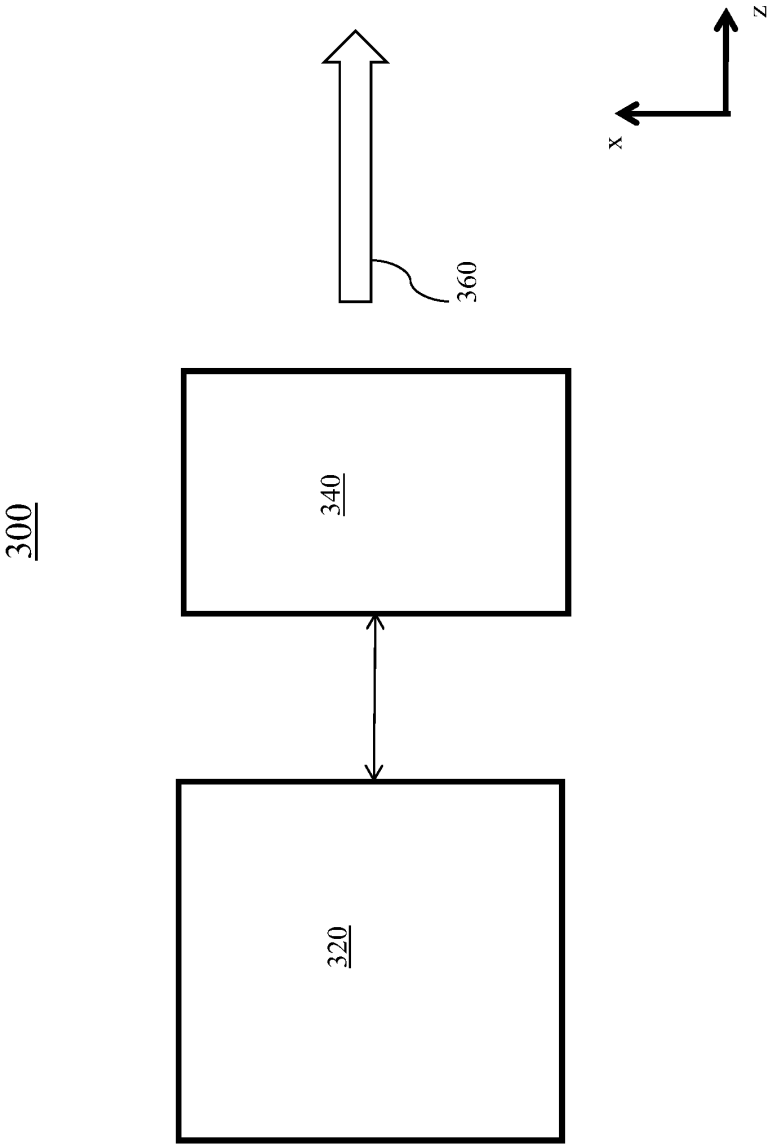


Fig. 14

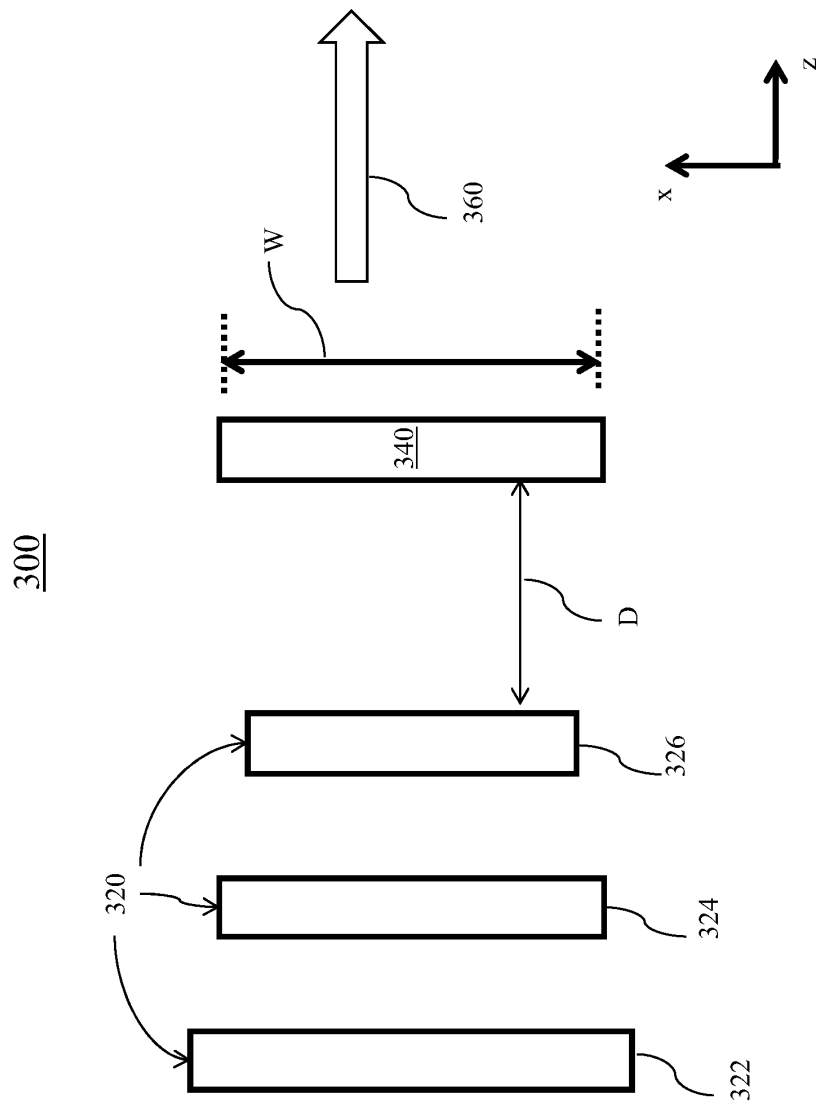


Fig. 15

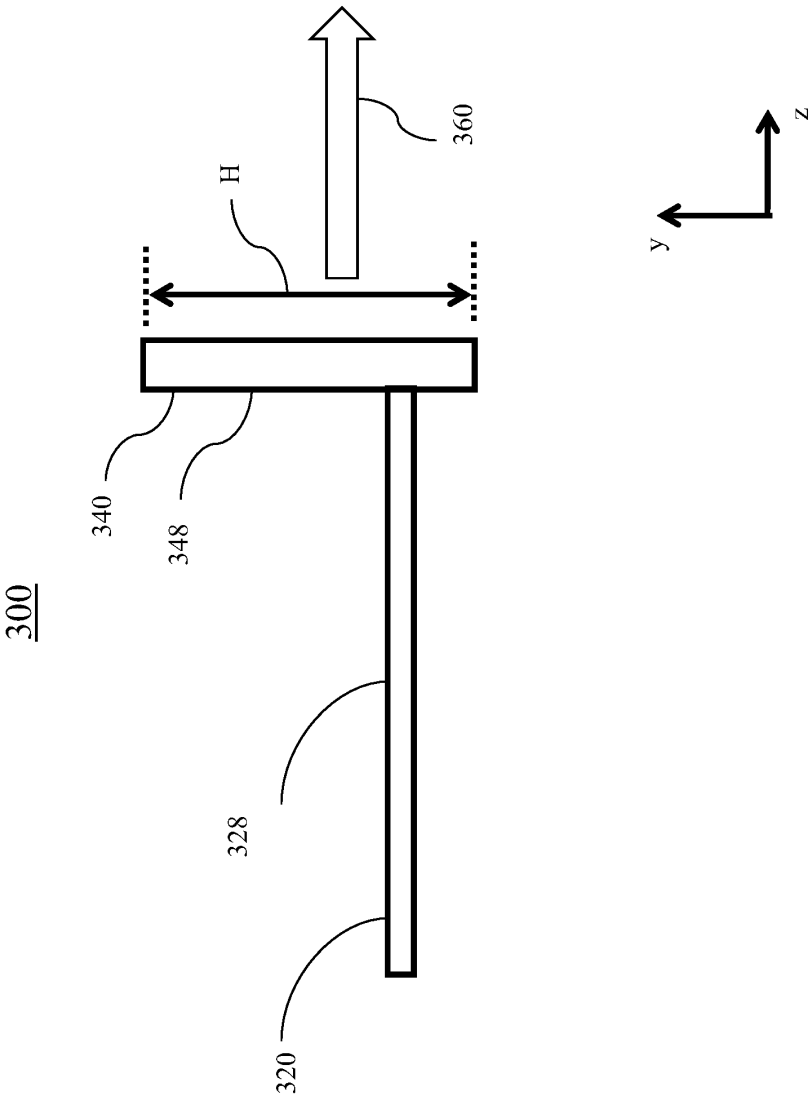


Fig. 16

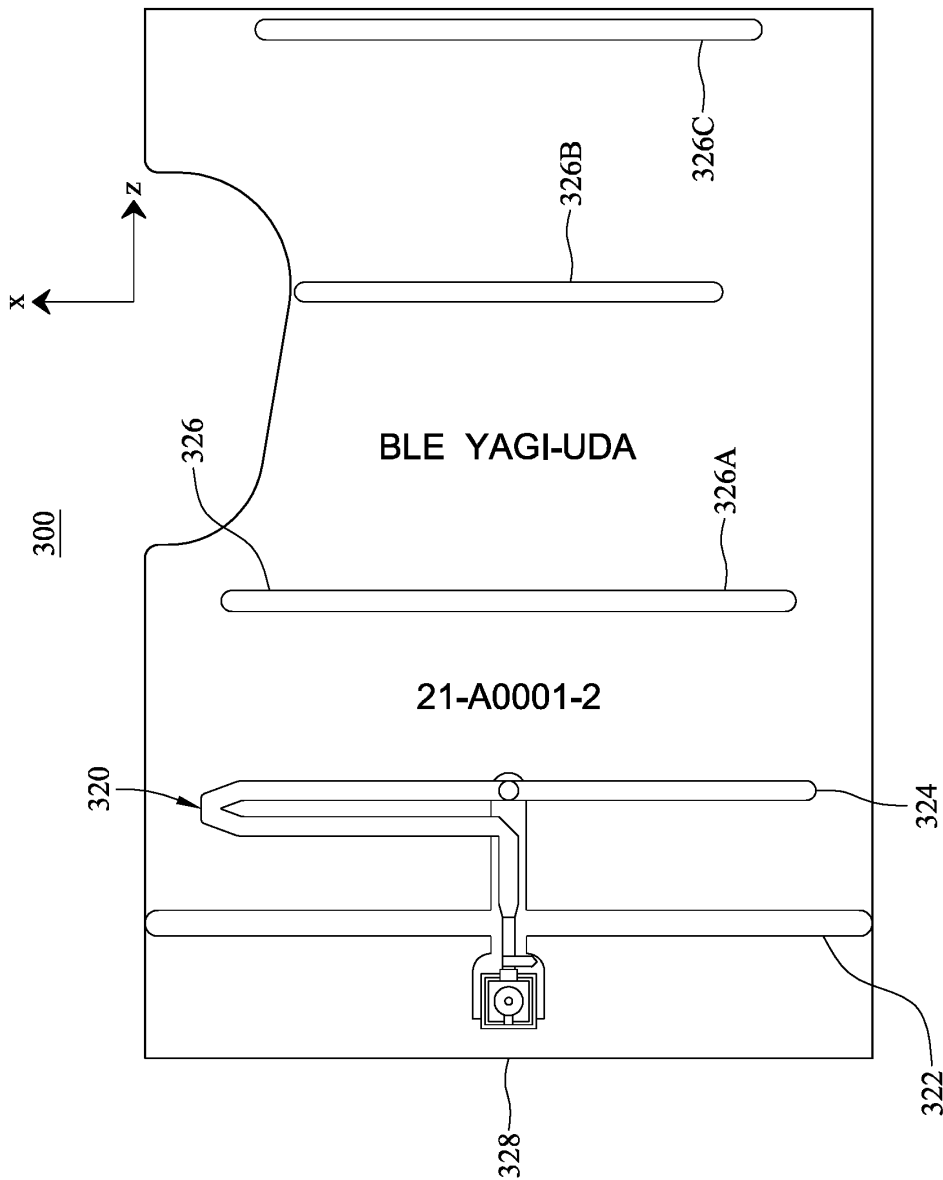


Fig. 17

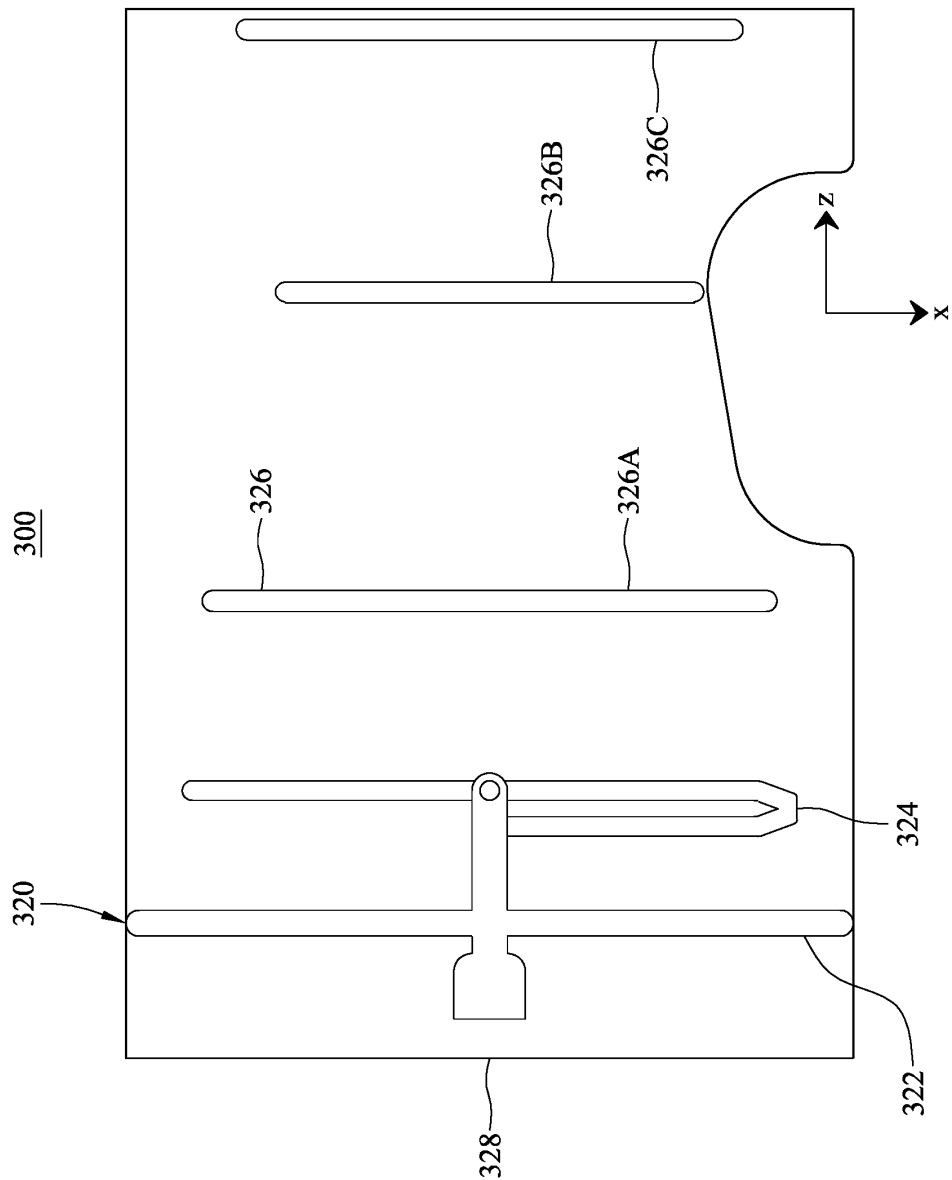


Fig. 18

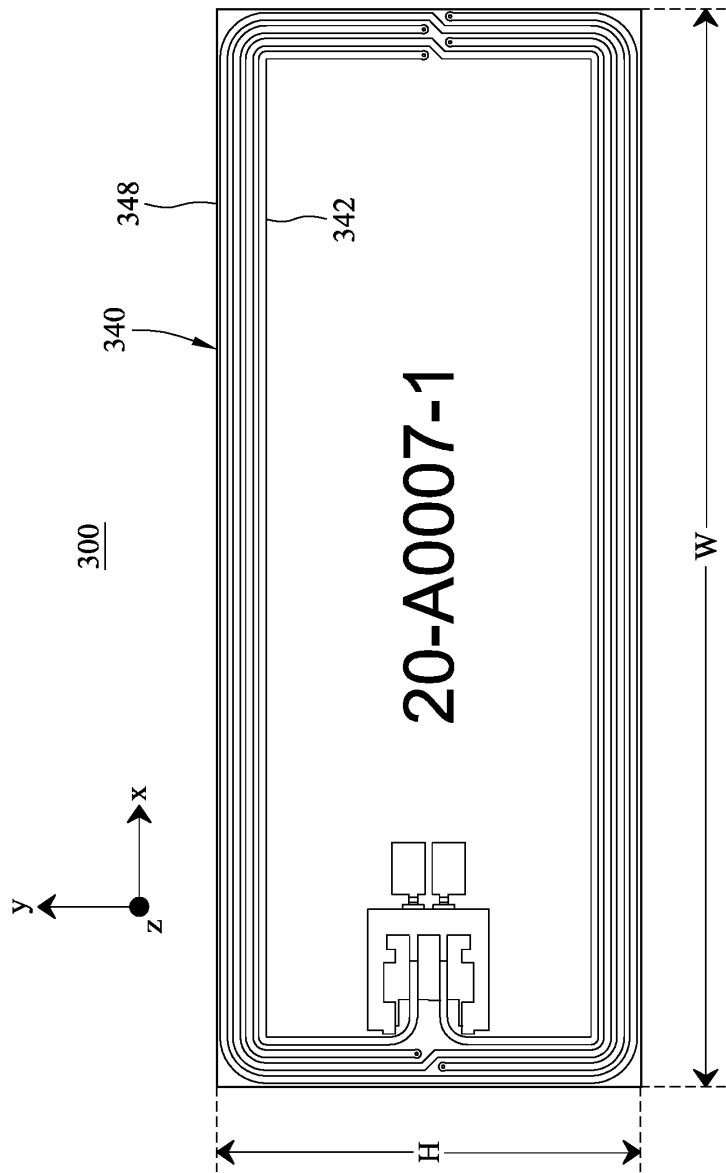


Fig. 19

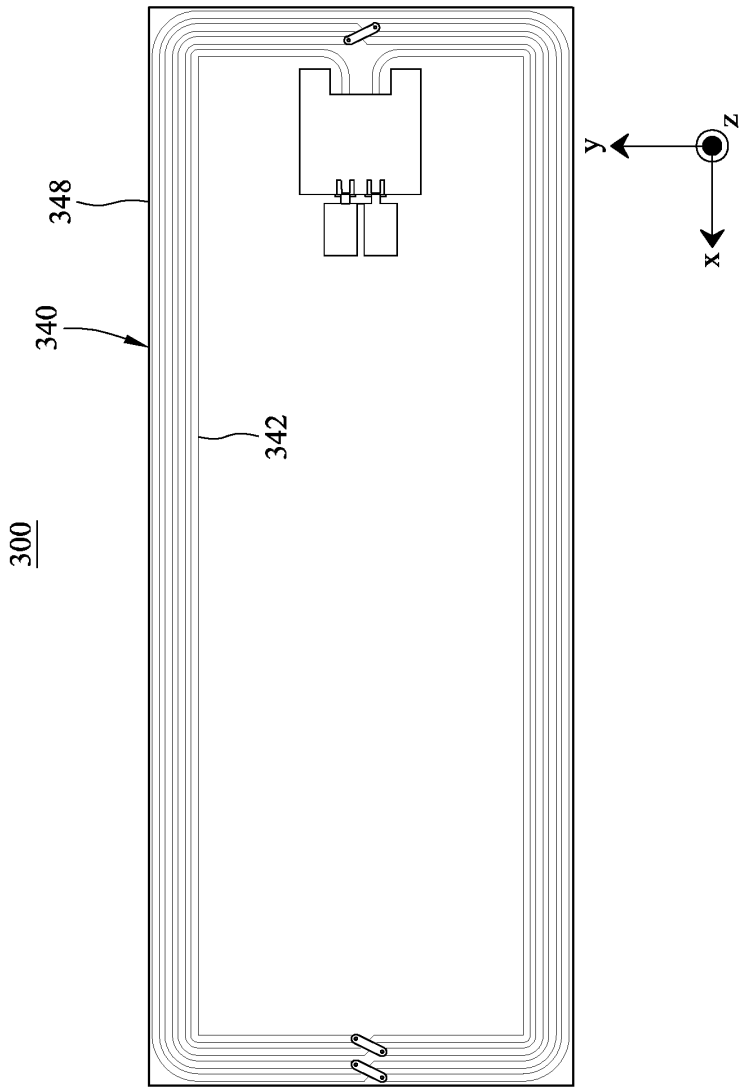


Fig. 20

300

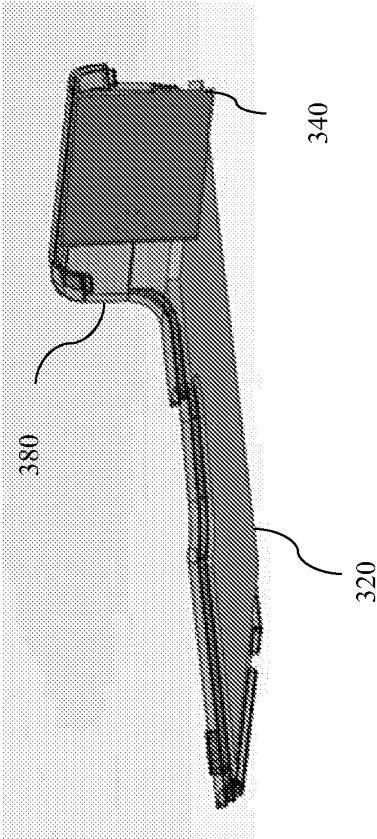


Fig. 21

300

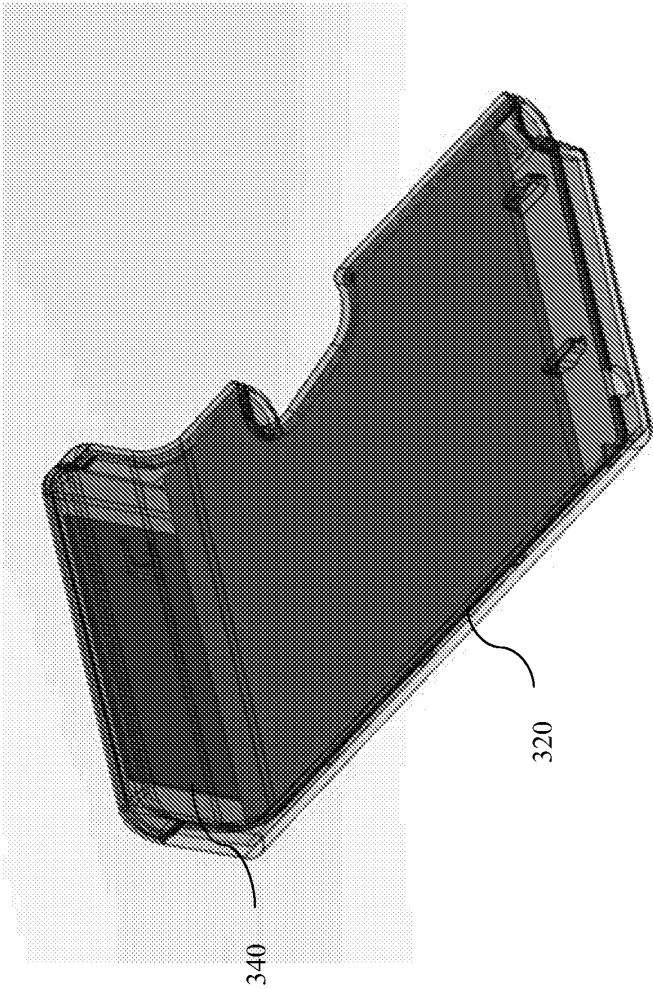


Fig. 22

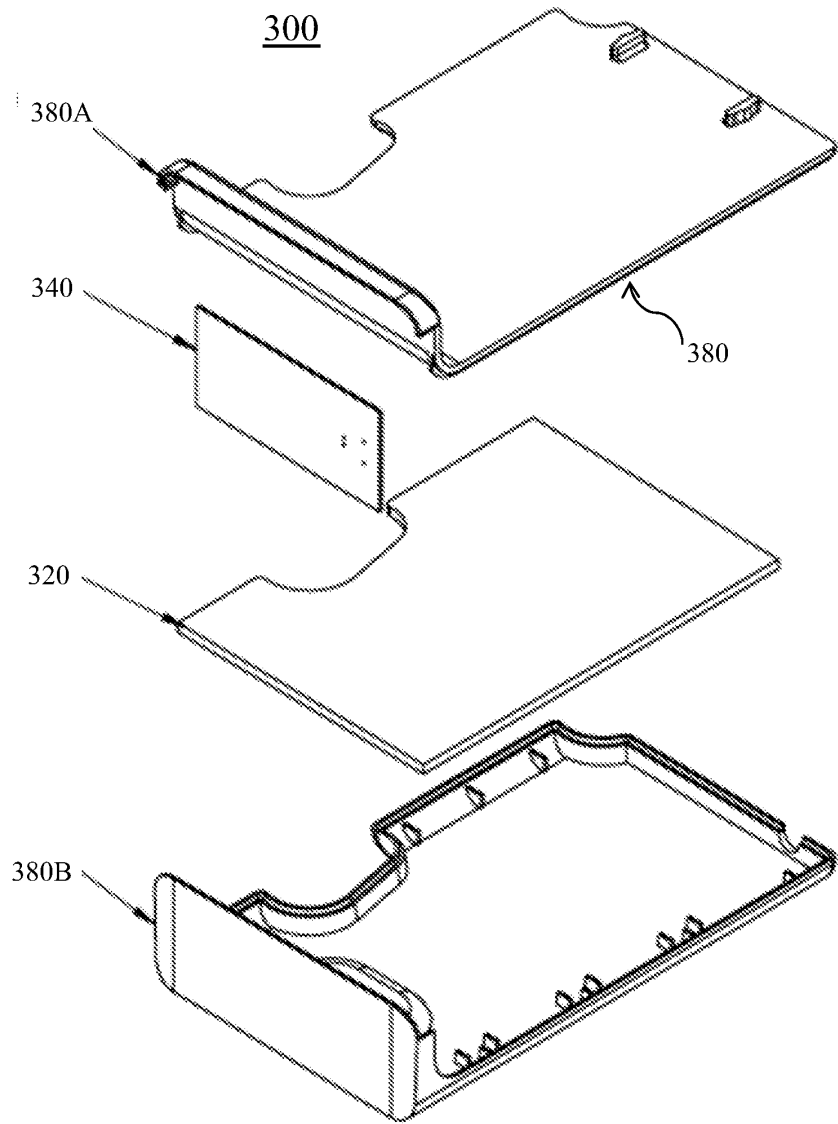
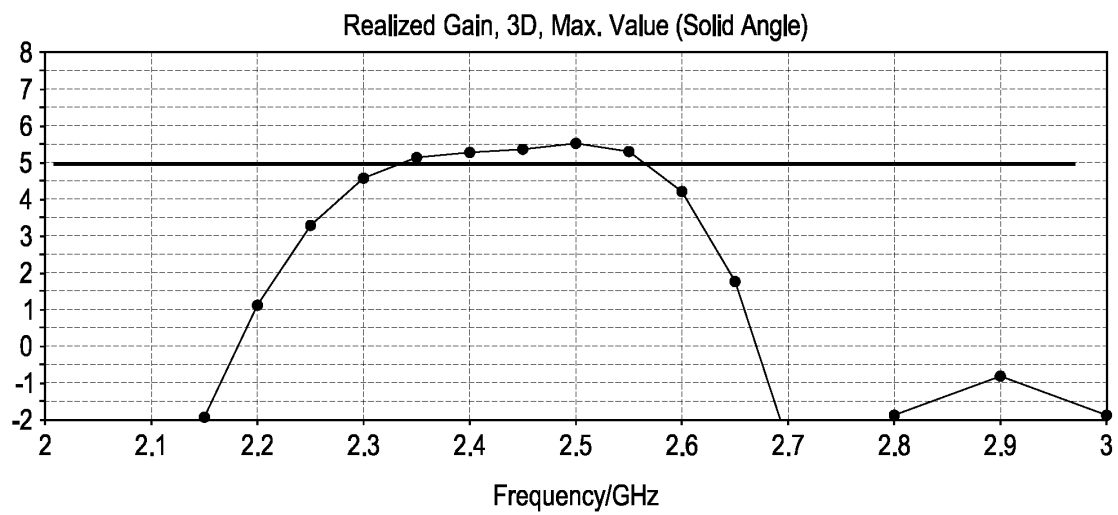
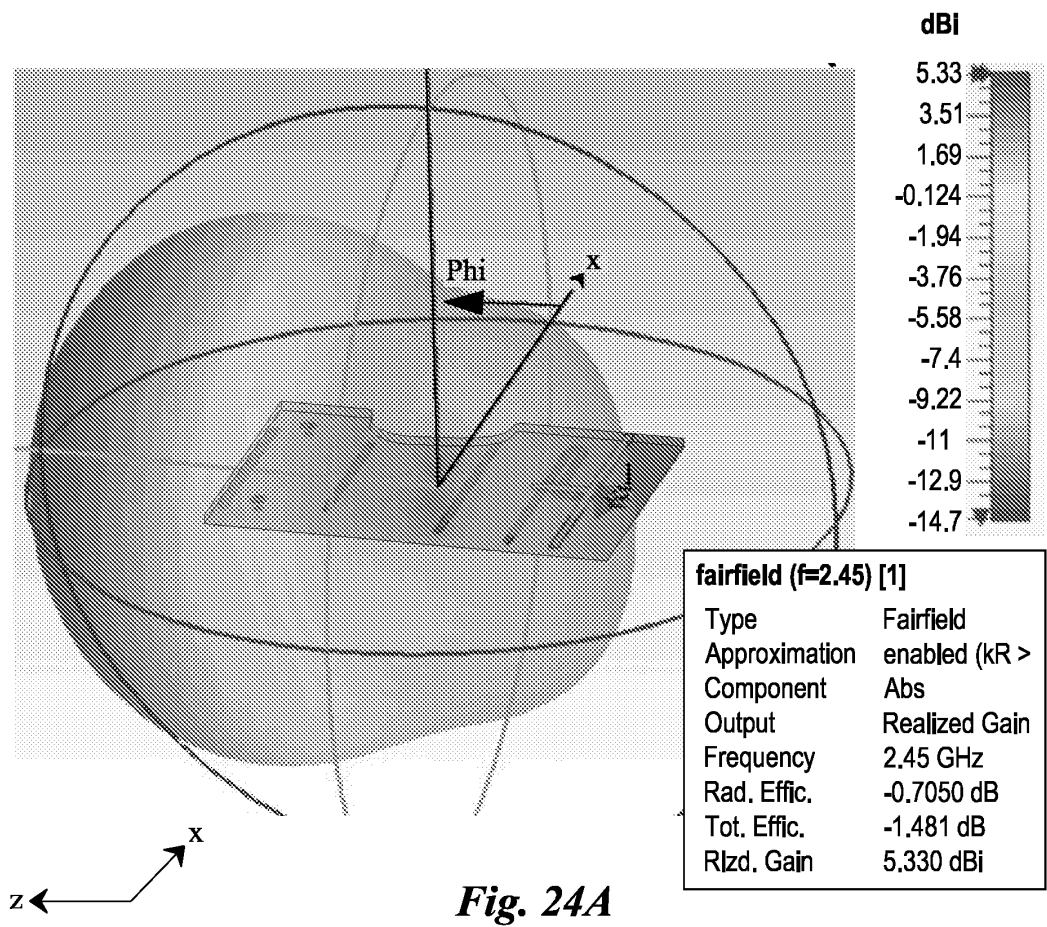


Fig. 23



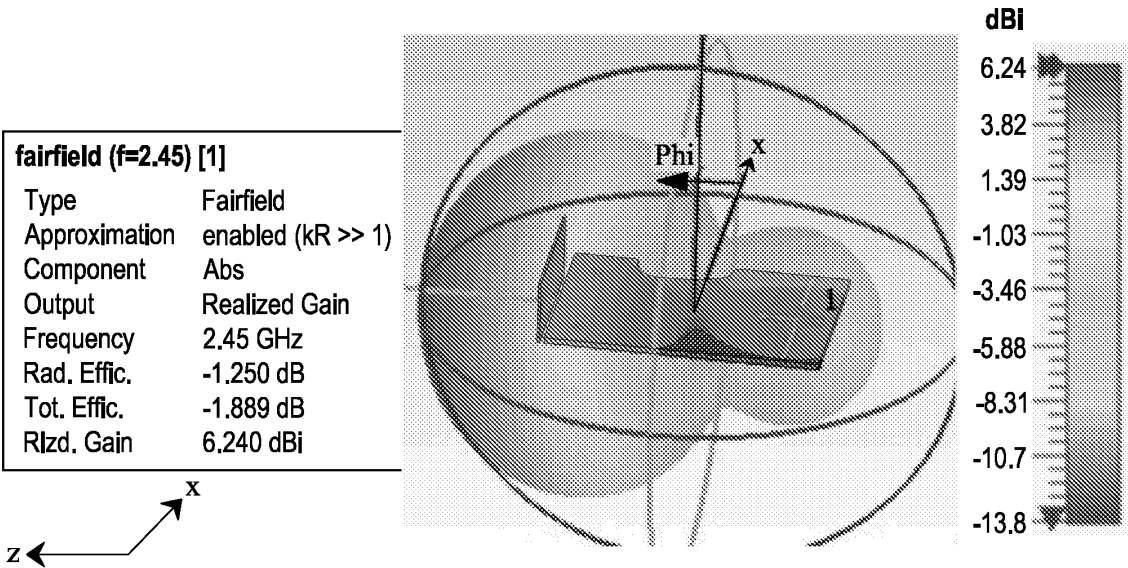


Fig. 25A

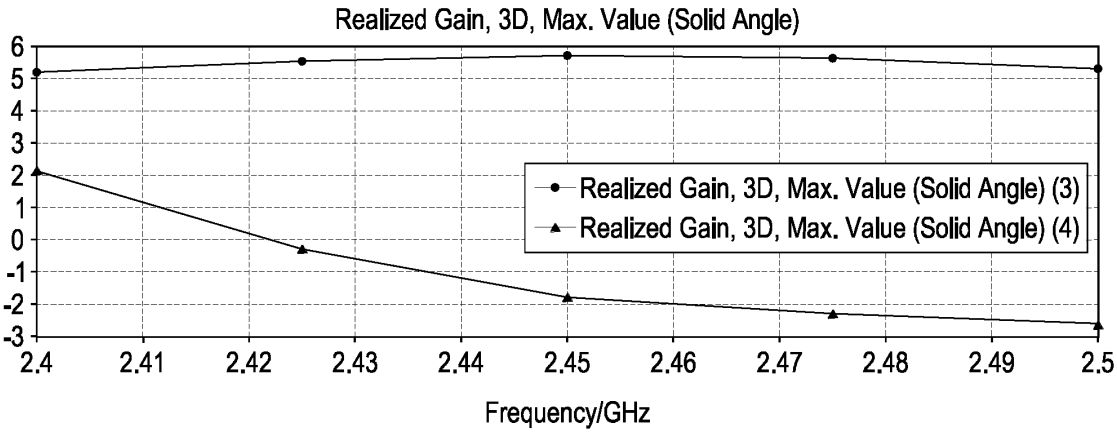
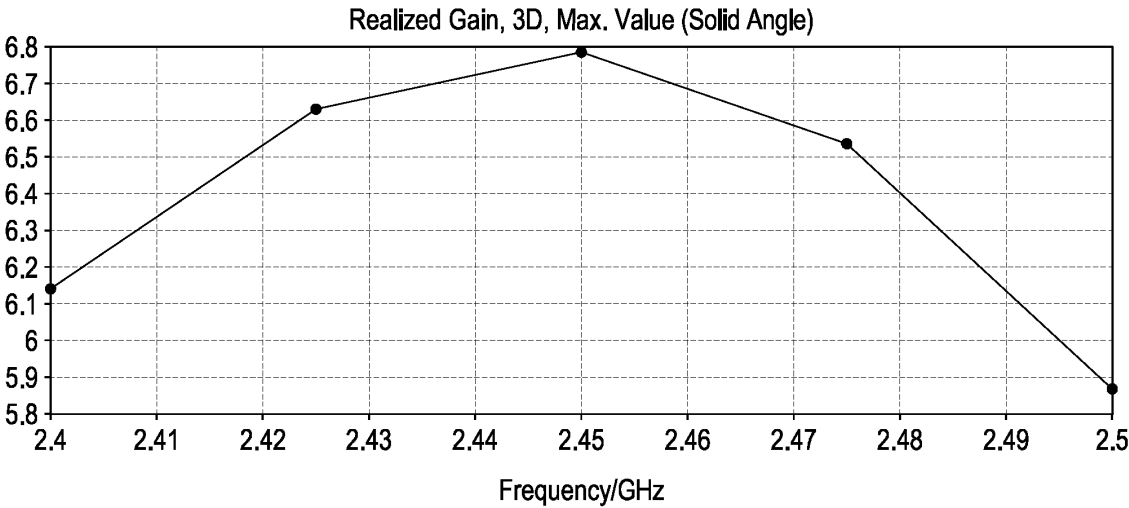
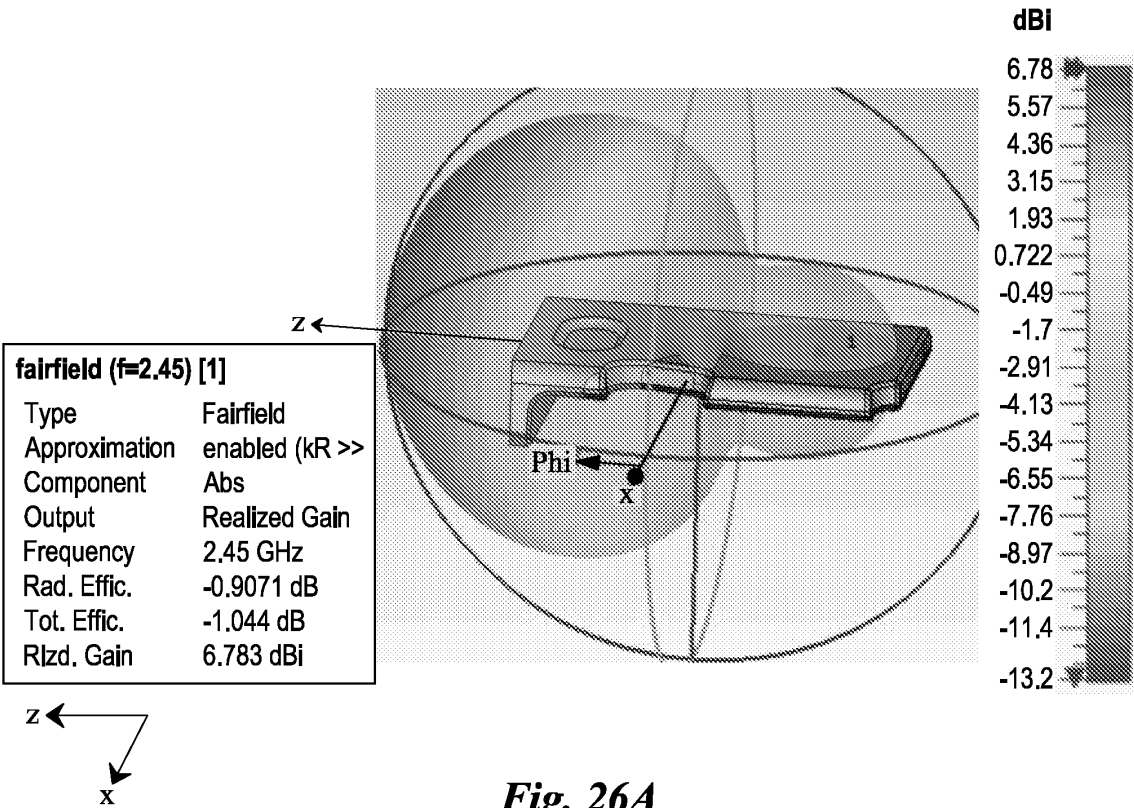


Fig. 25B



400

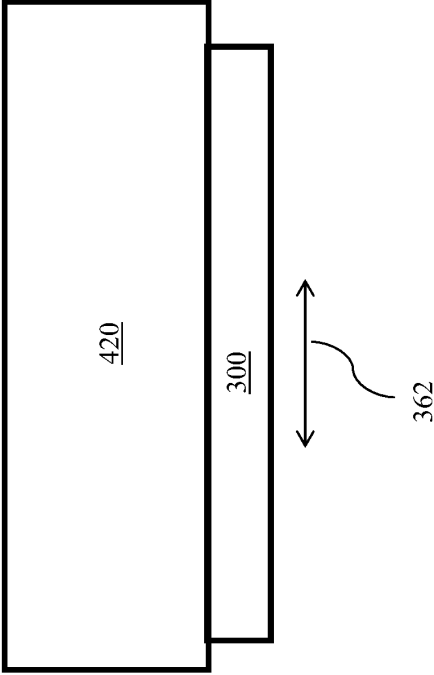


Fig. 27

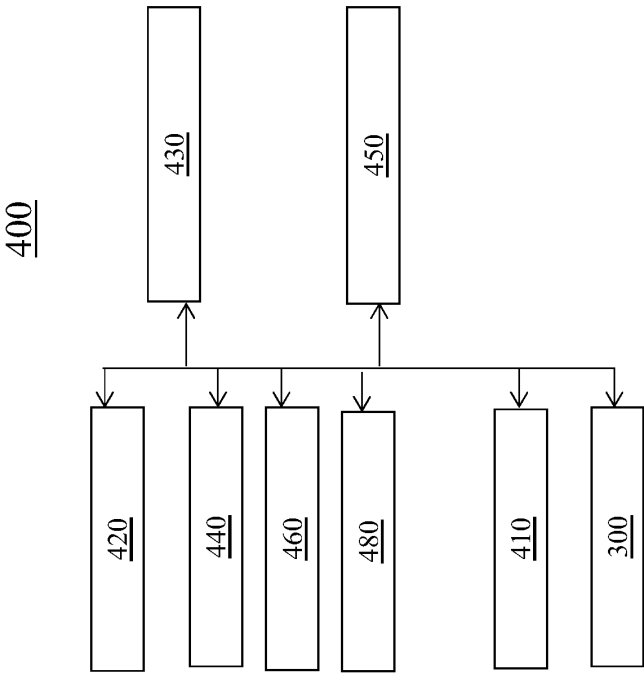


Fig. 28

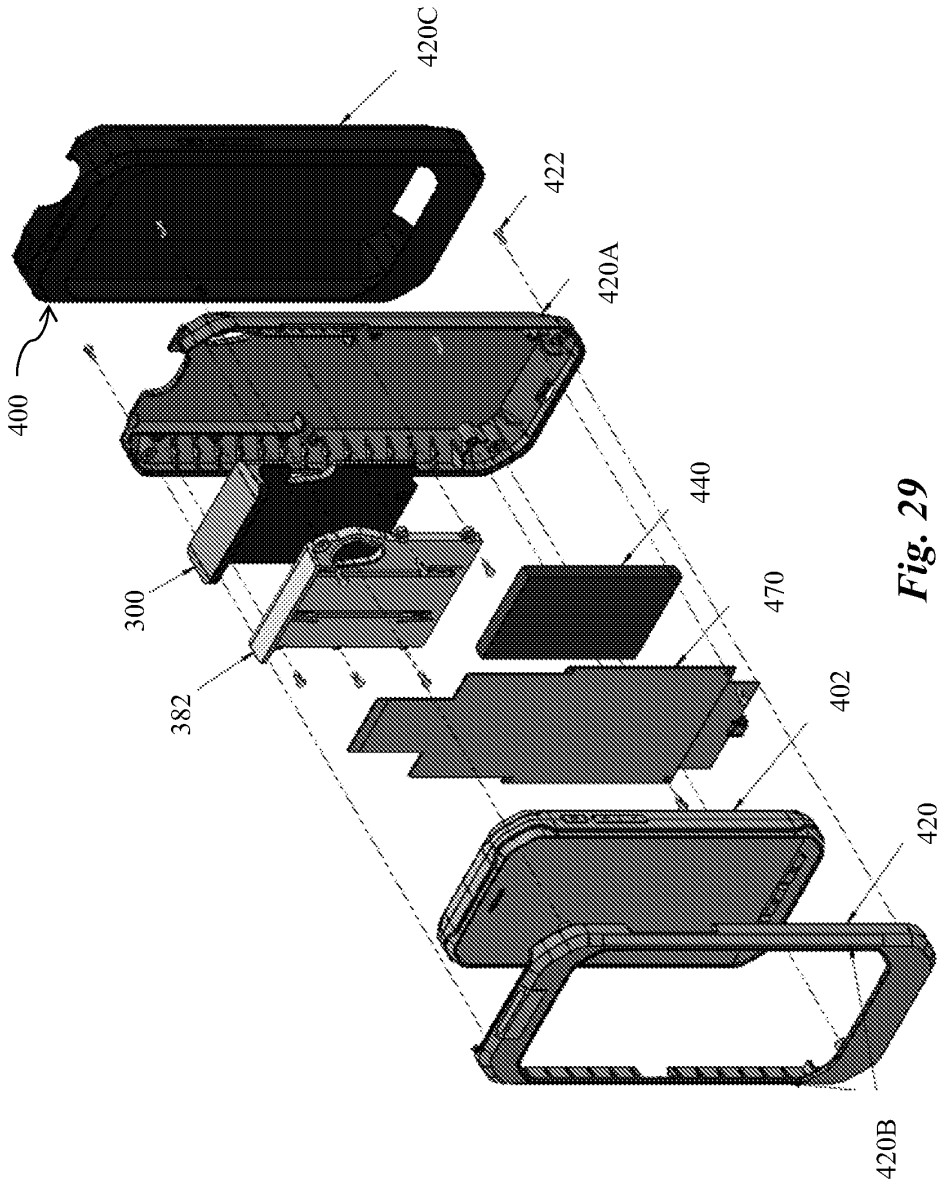


Fig. 29

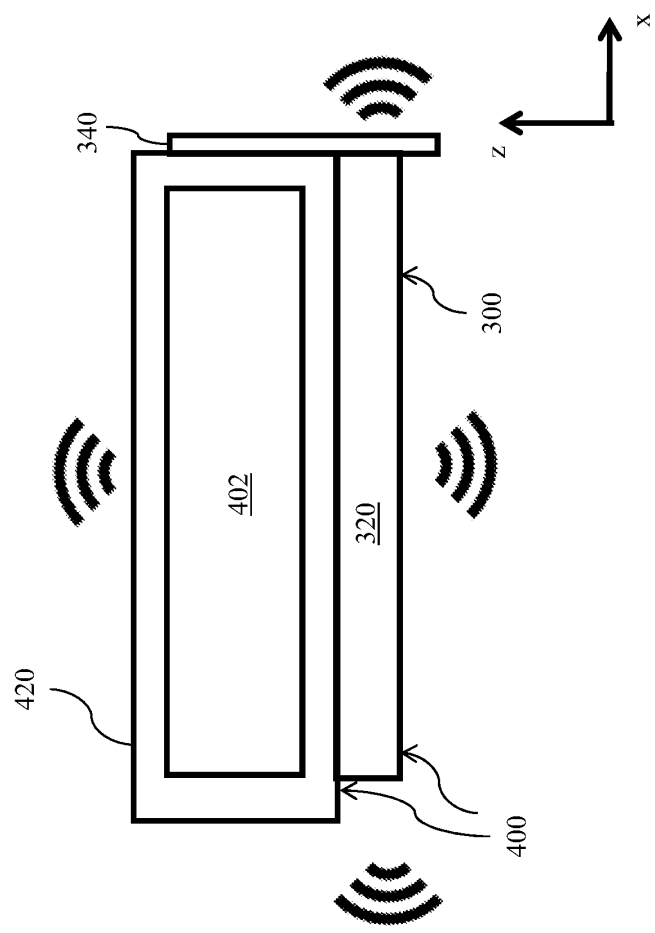


Fig. 30

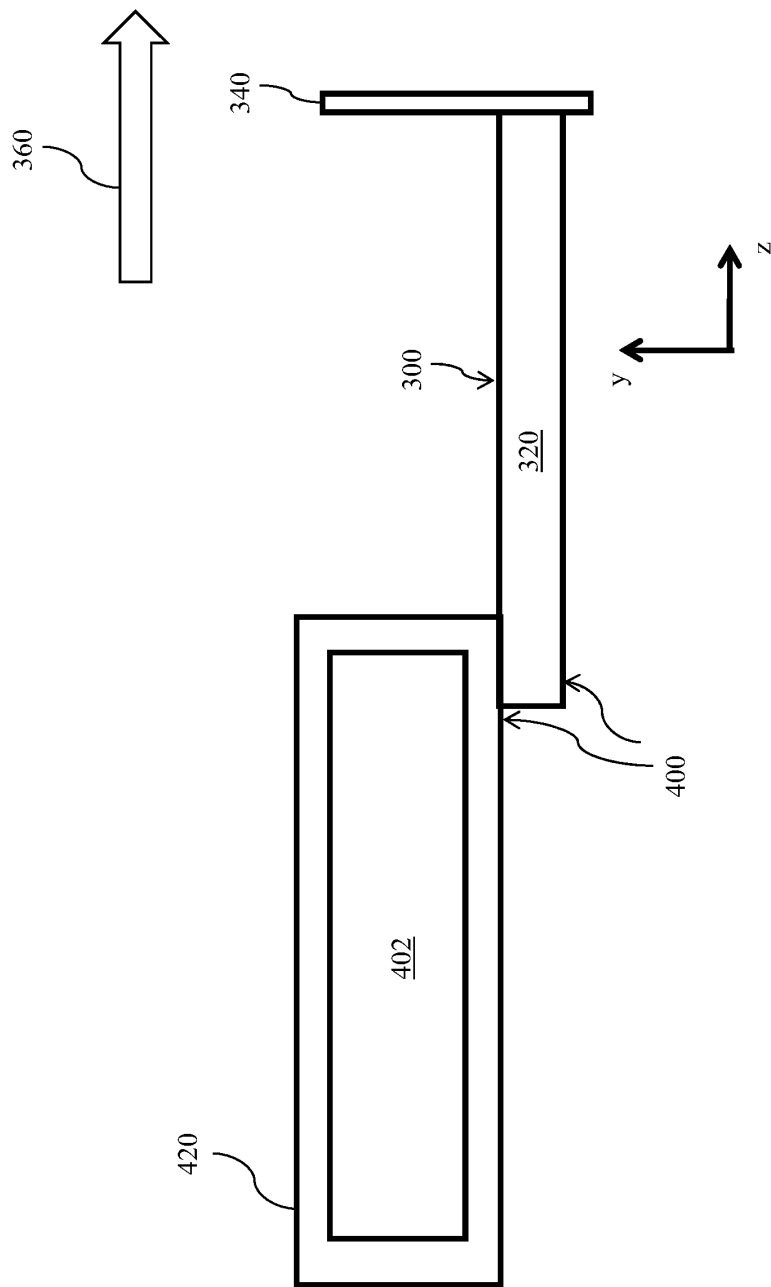


Fig. 31

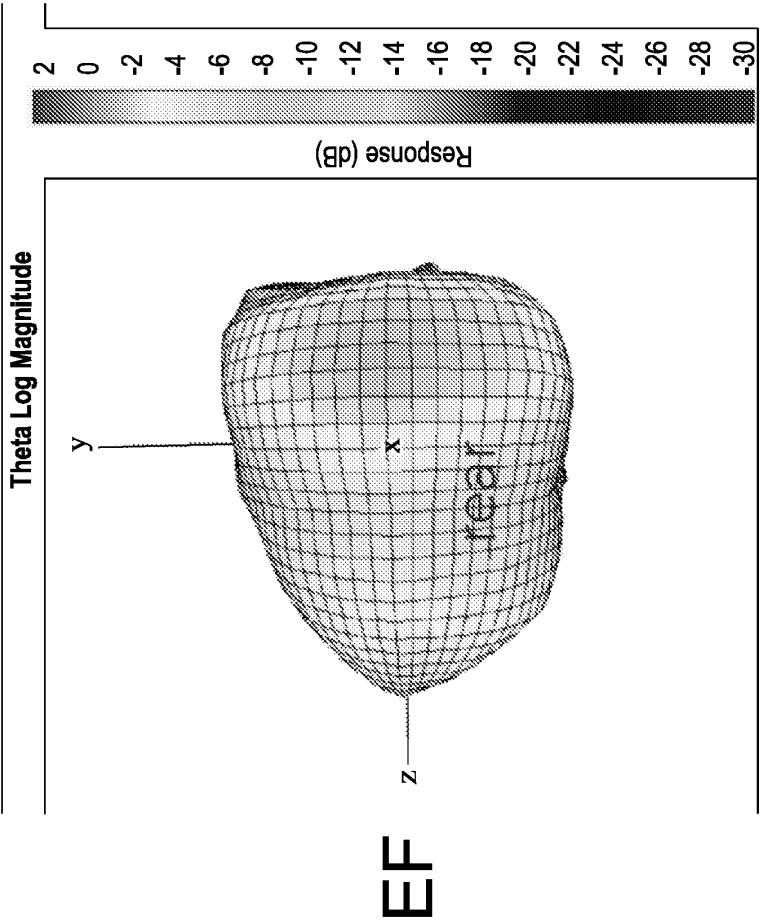


Fig. 32

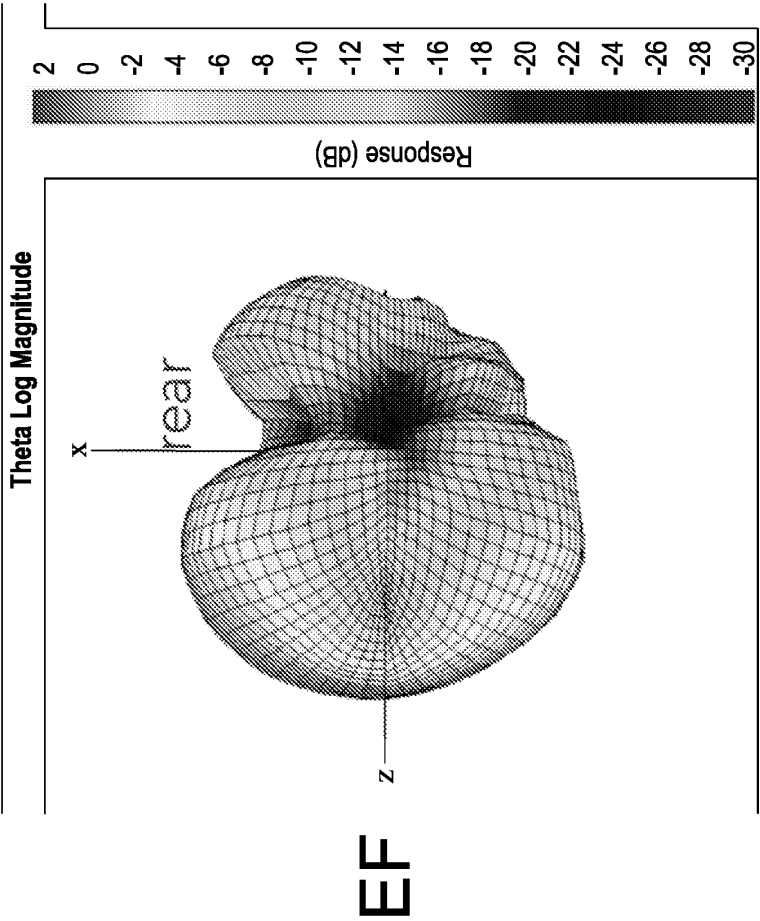


Fig. 33

490

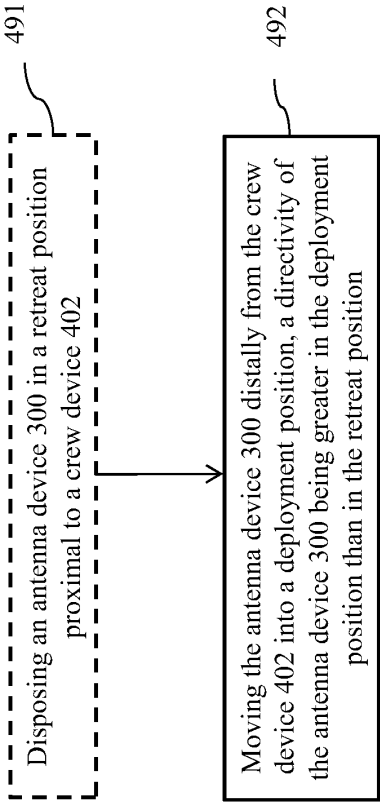


Fig. 34

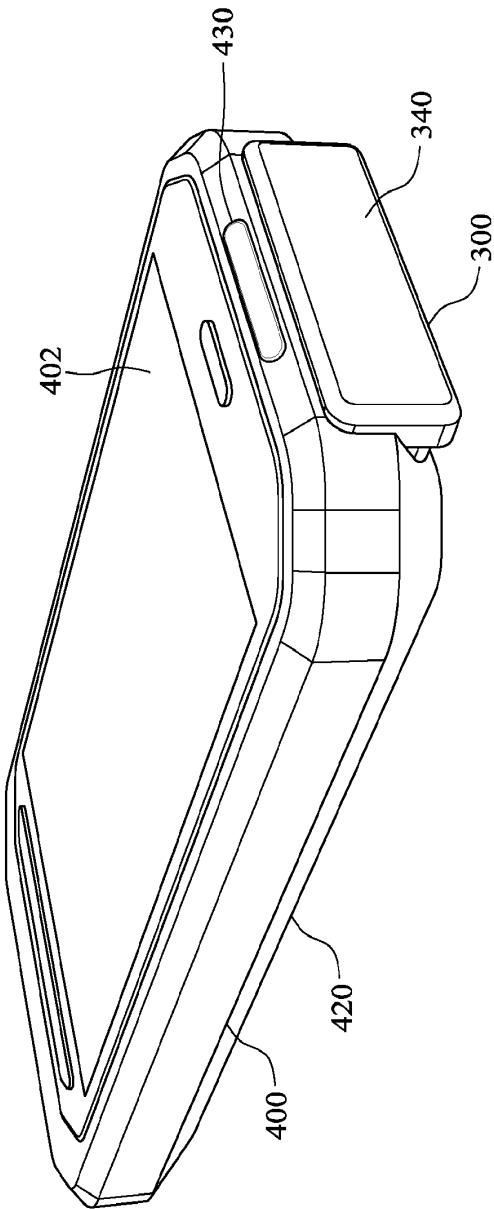


Fig. 35

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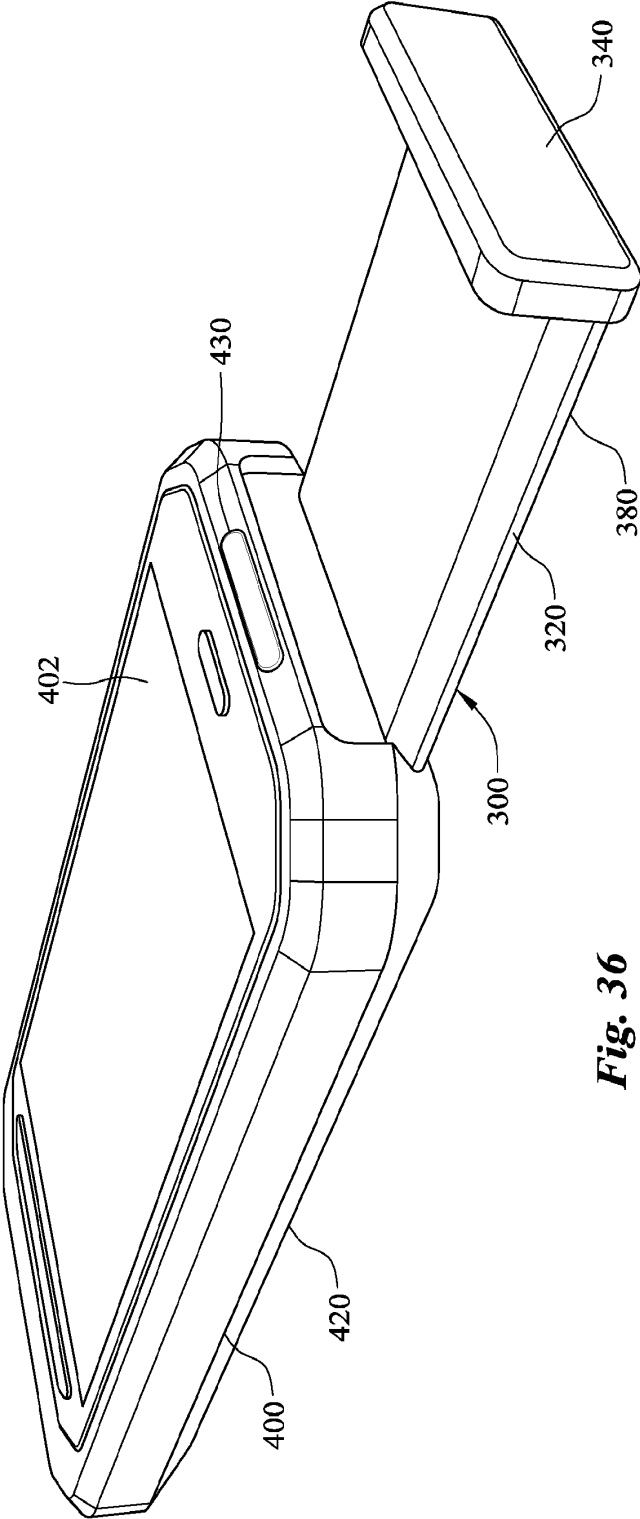


Fig. 36

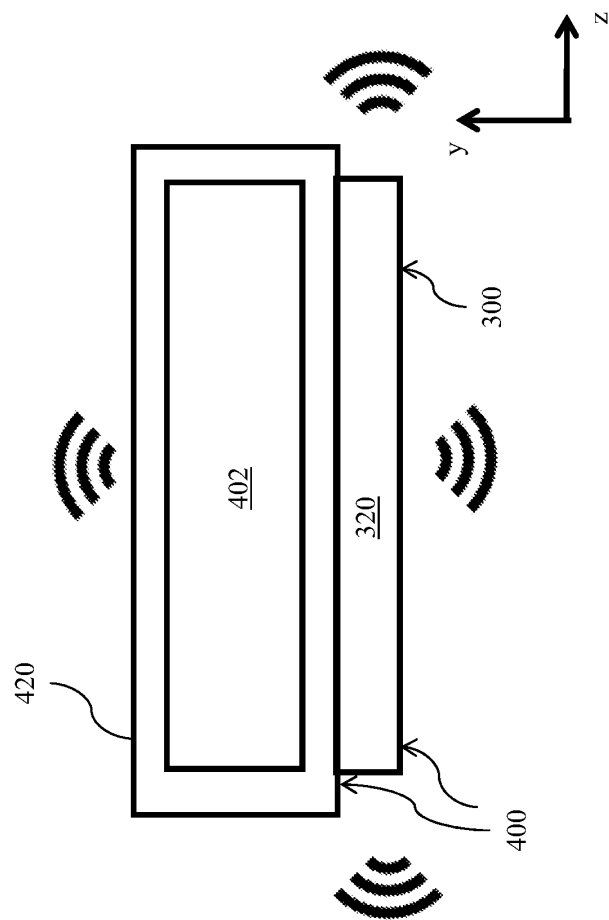


Fig. 37

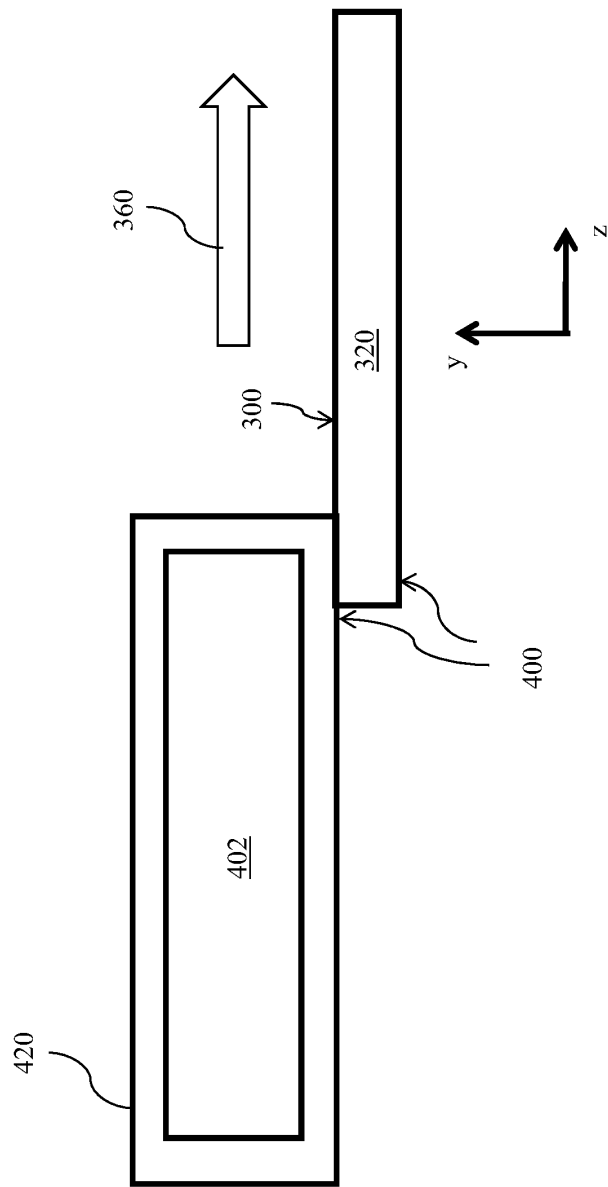


Fig. 38

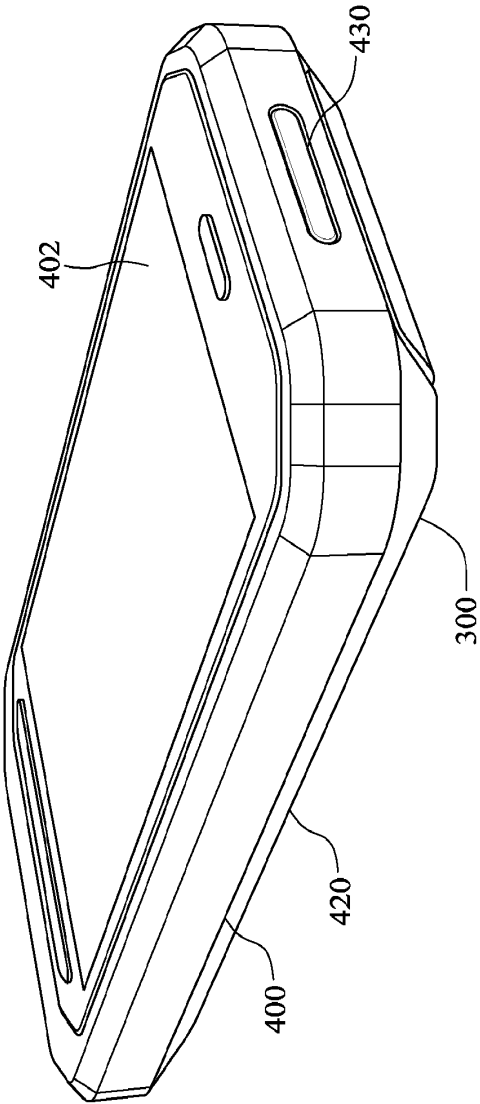


Fig. 39

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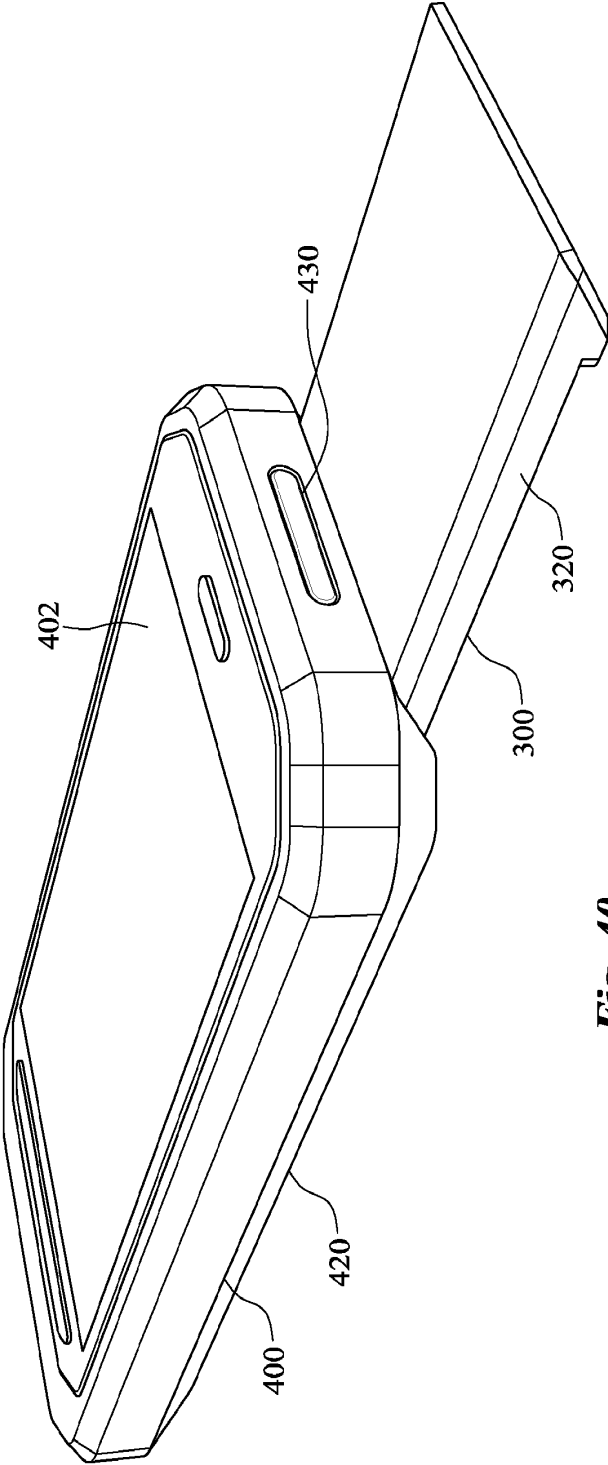


Fig. 40

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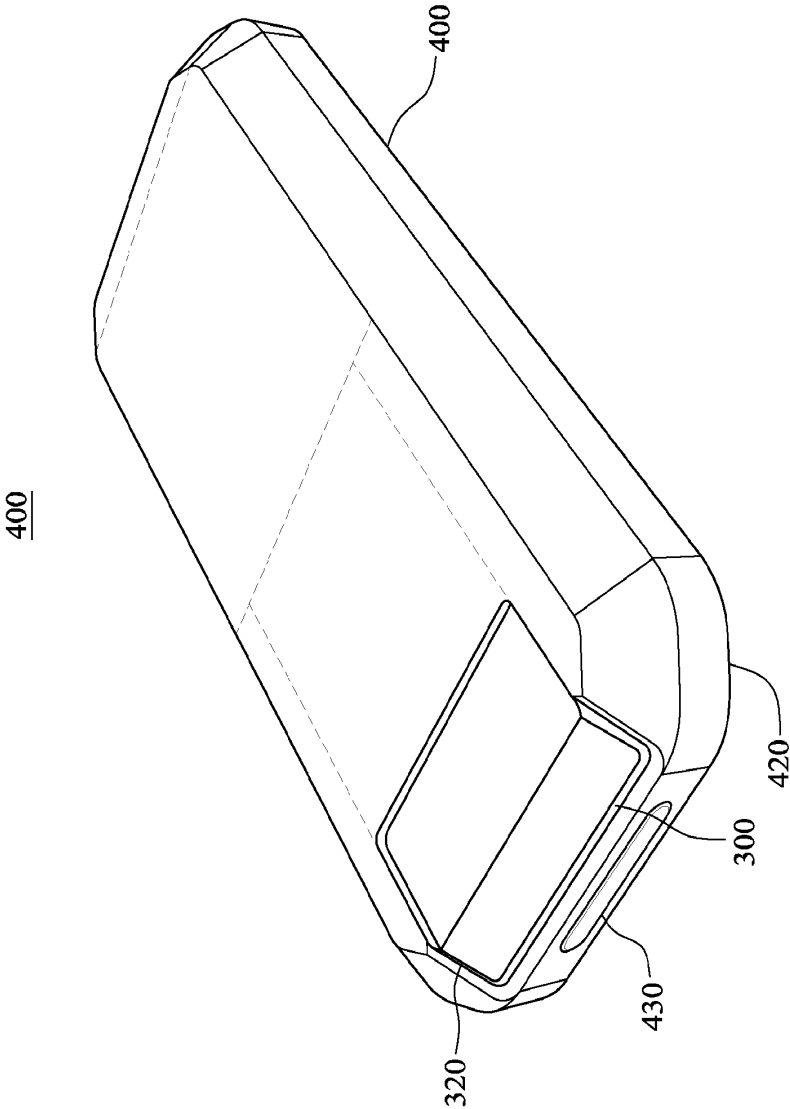


Fig. 41

400

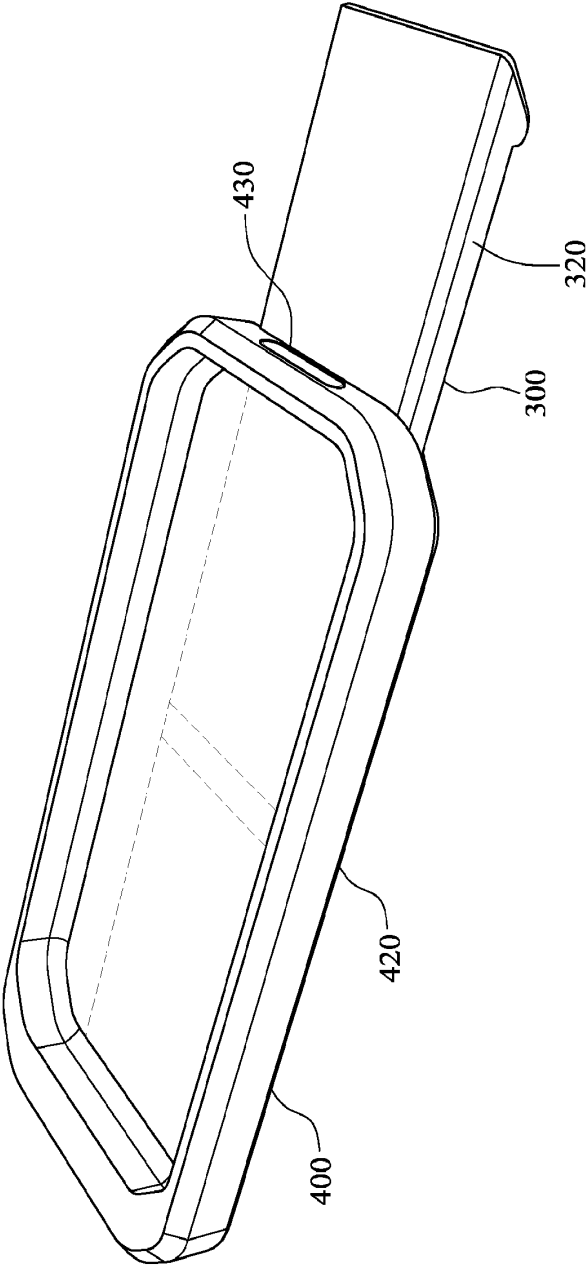


Fig. 42

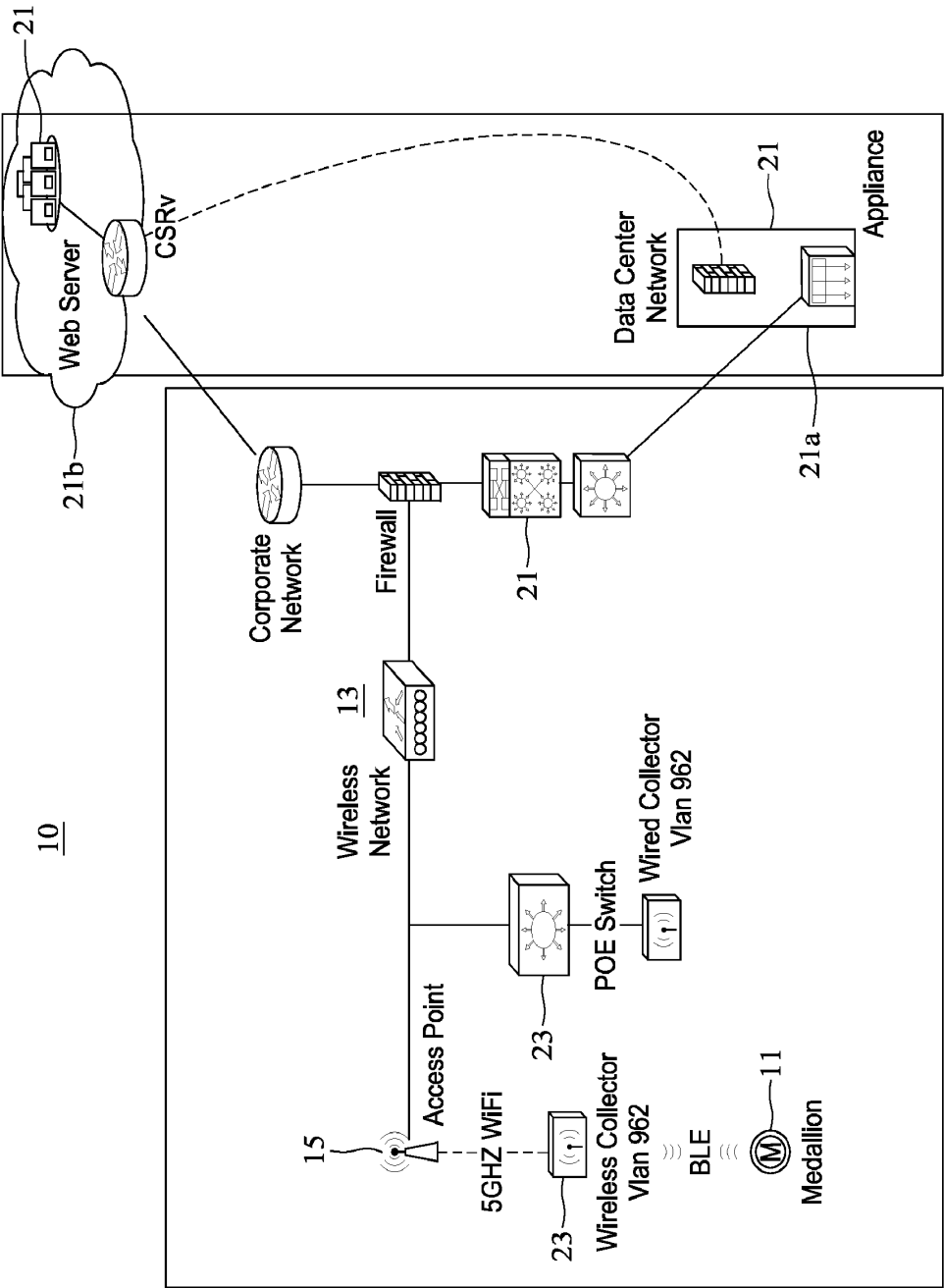


Fig. 43

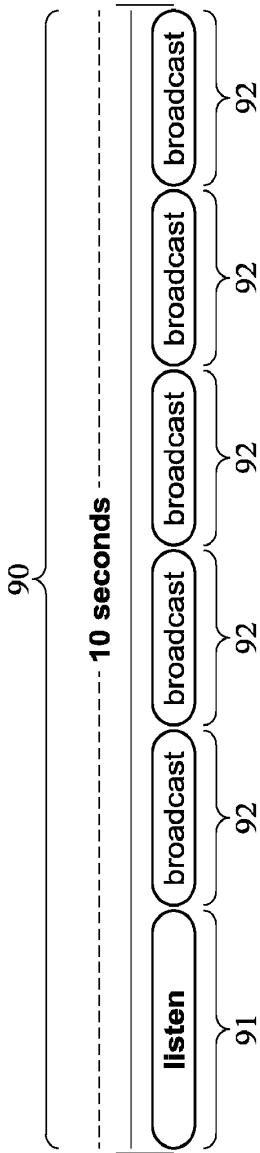


Fig. 44a

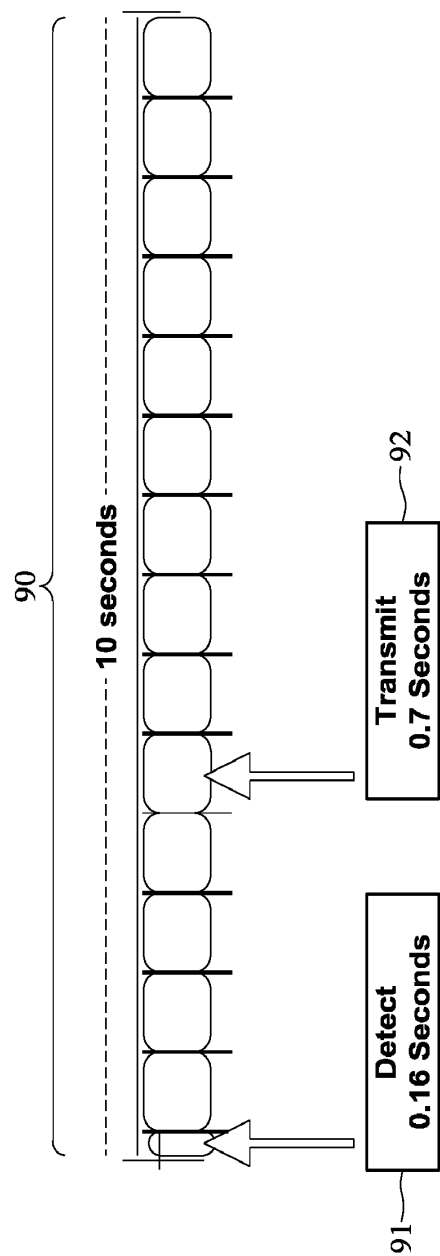


Fig. 44b

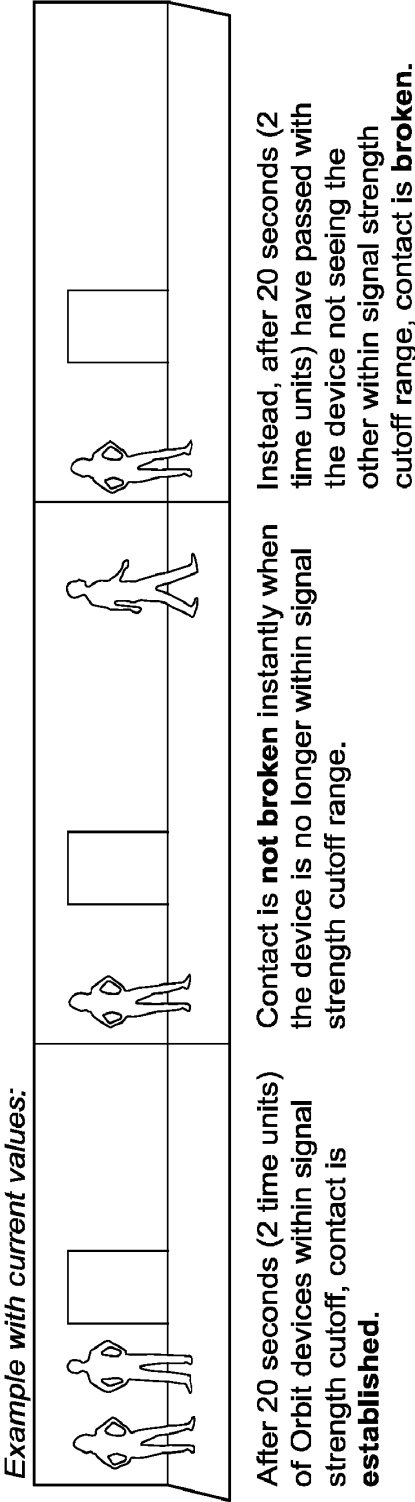


Fig. 44c

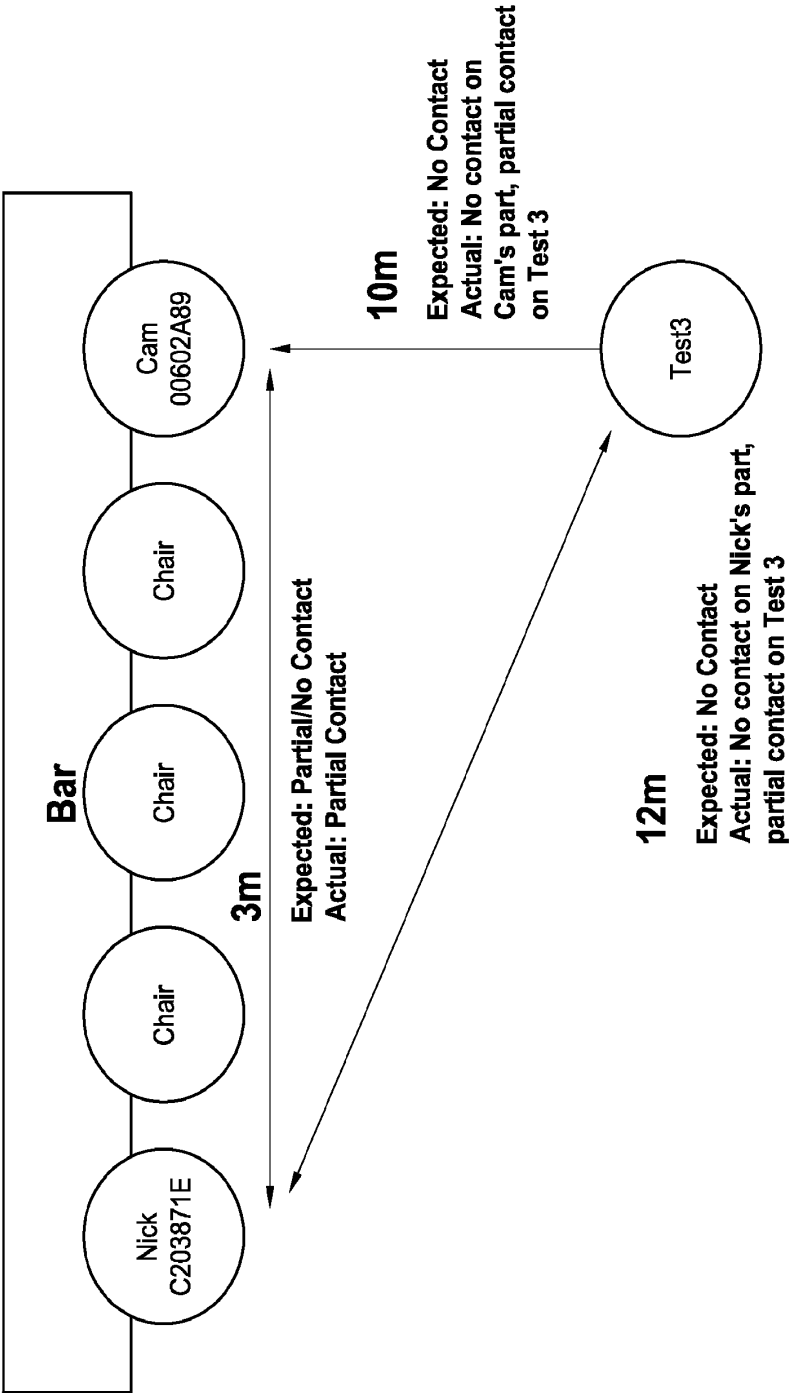


Fig. 44d

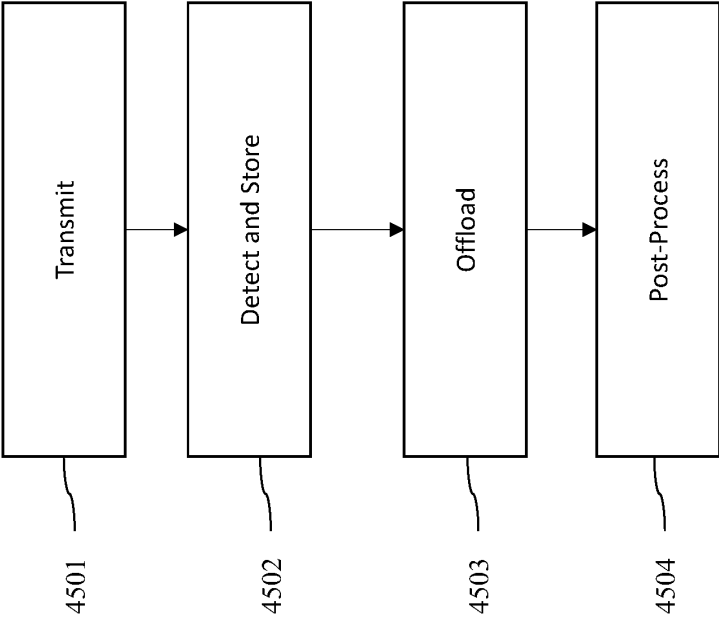


Fig. 45

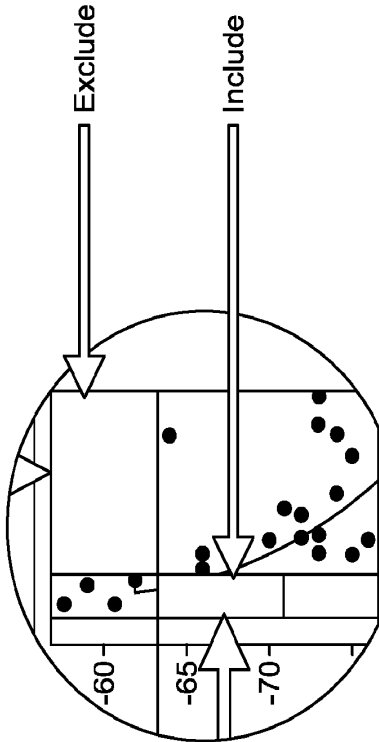


Fig. 46a

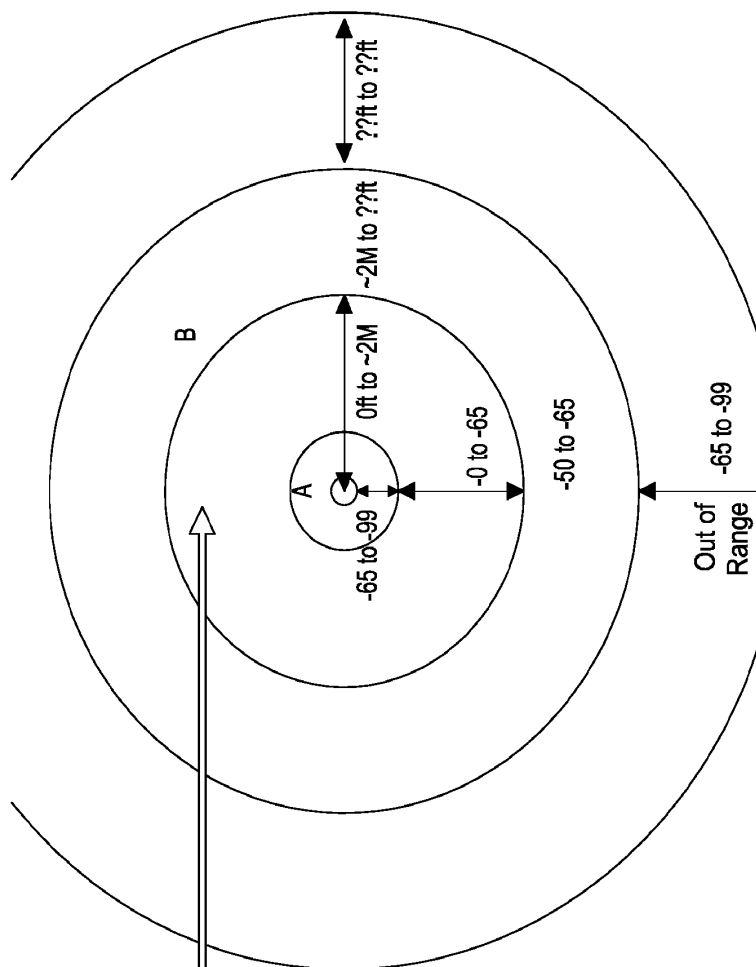


Fig. 46b

2 Consecutive reads during 20
Seconds at -0 to -65
= Statistical approximation of 2M
+ keep alive for 150 Seconds to
sustain contact

Statistical Grey Areas

A - Within 0 to 2M but not seen.
Statistically small. Typically due
RFID blocking

B - Outside 2M but seen within thresholds as if inside 2M
possible with strong line of sight, or variable/sustained durations, or RFID amplification. Important to not exclude else could lead to more inside of grey Area C

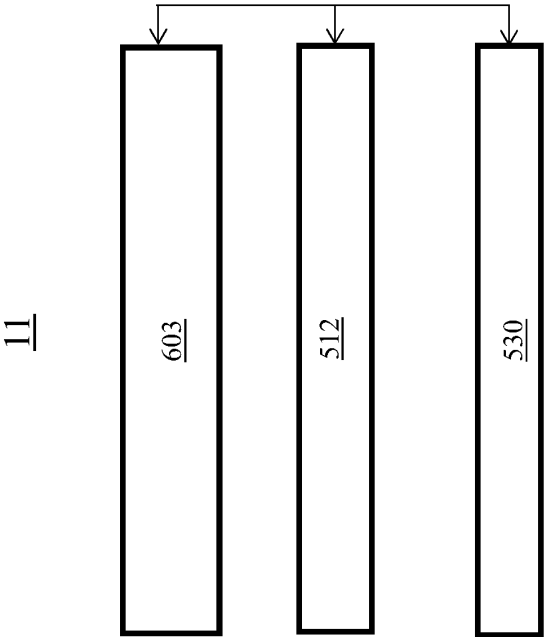


Fig. 47

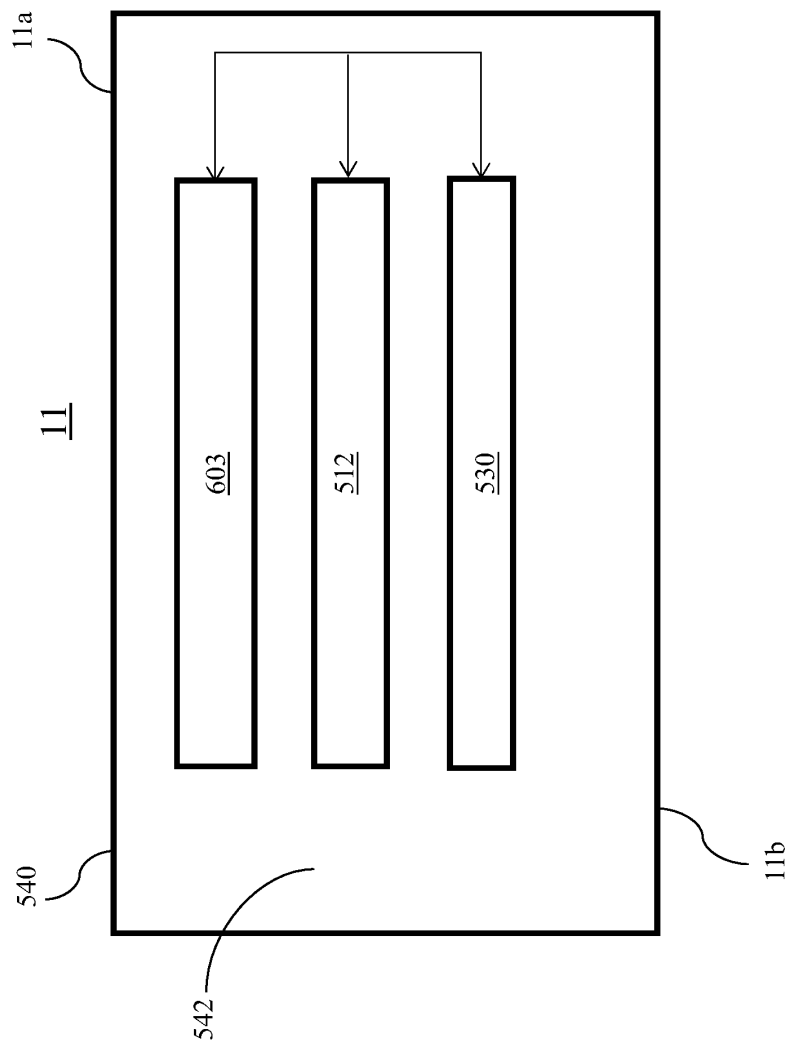


Fig. 48

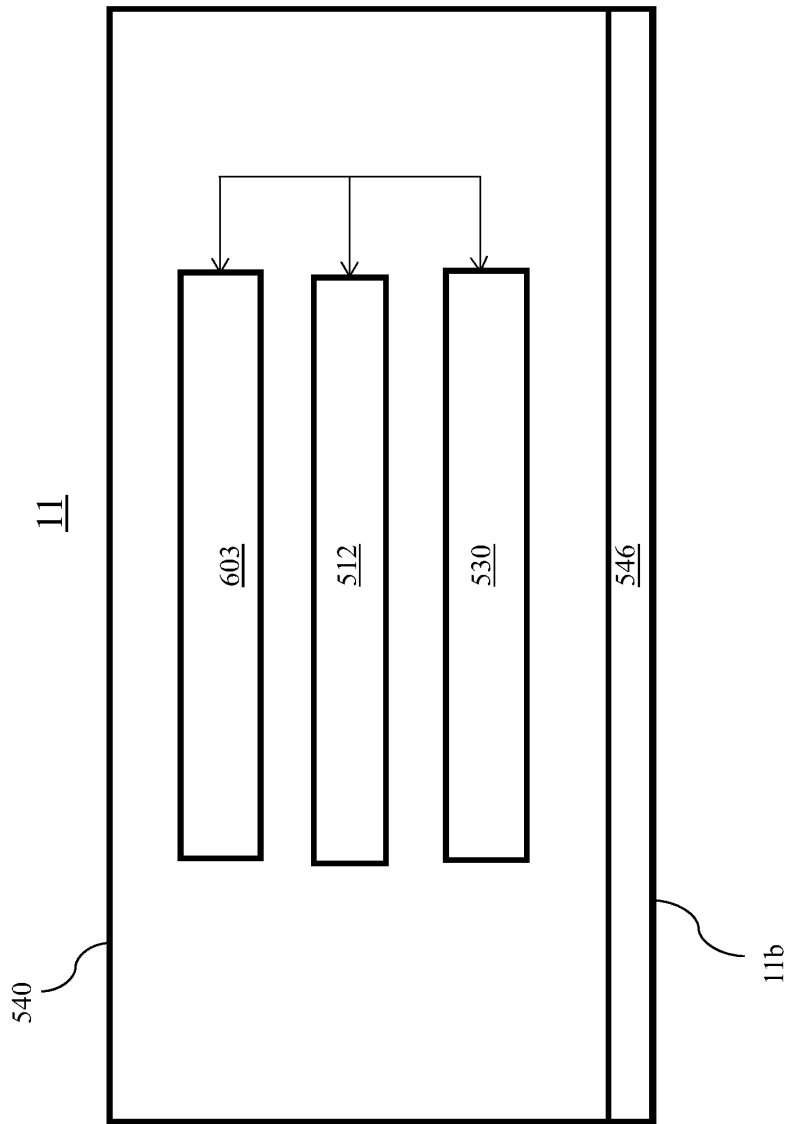


Fig. 49

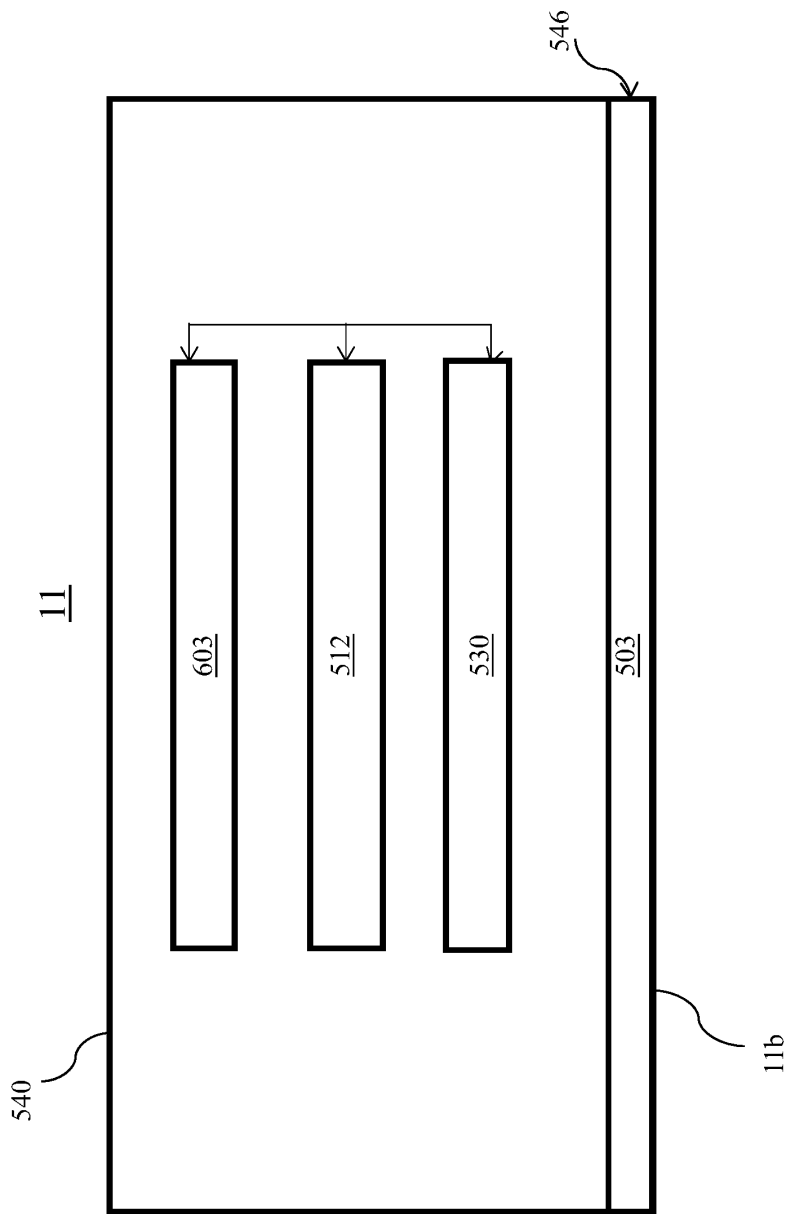


Fig. 50

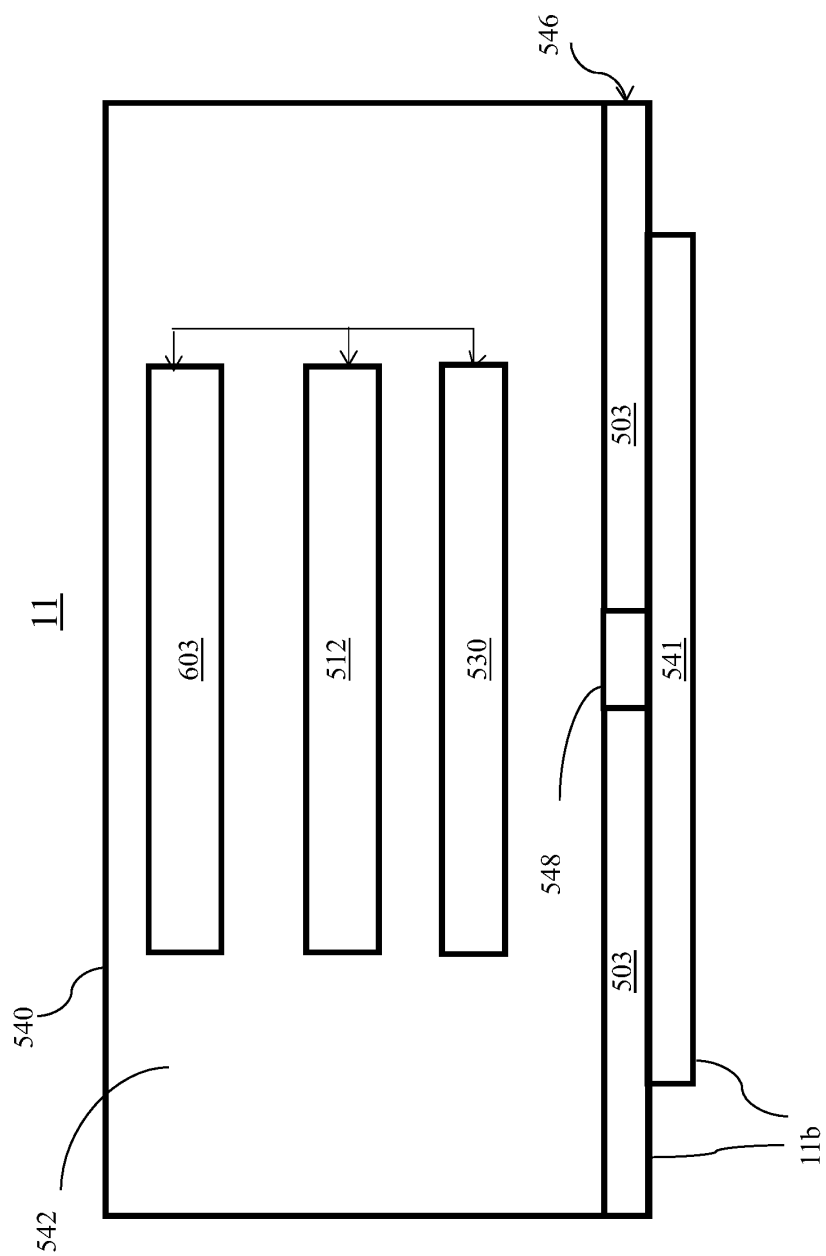


Fig. 51

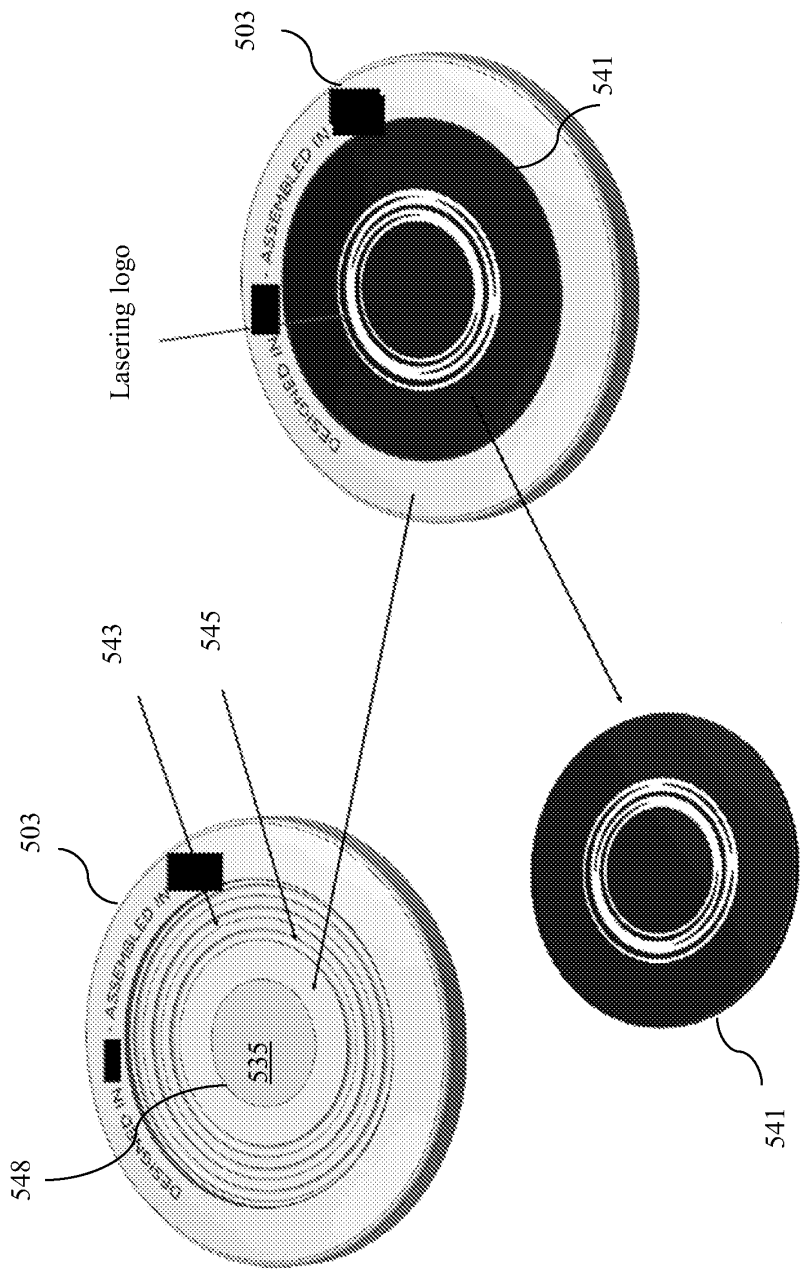


Fig. 52

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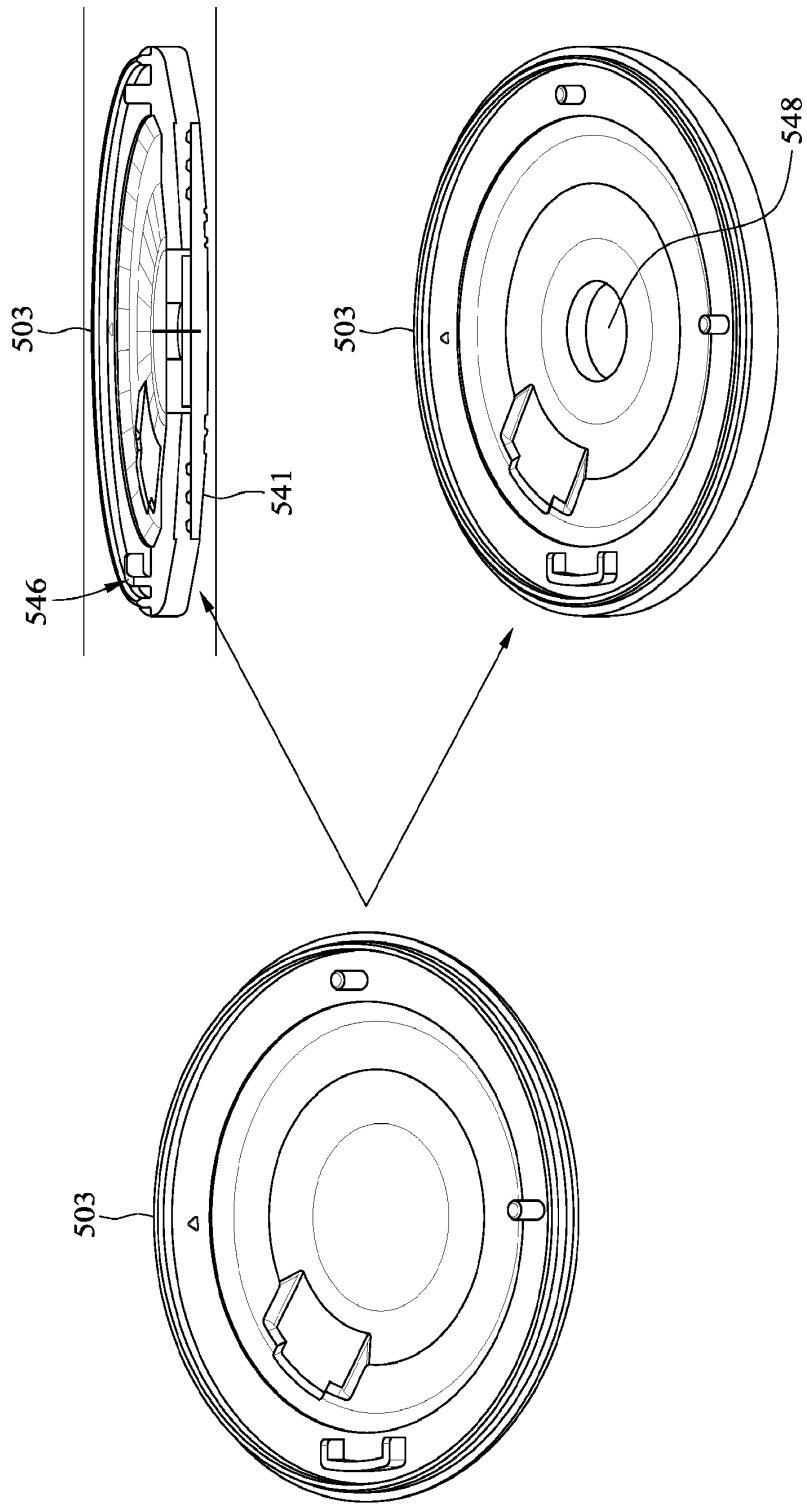


Fig. 53

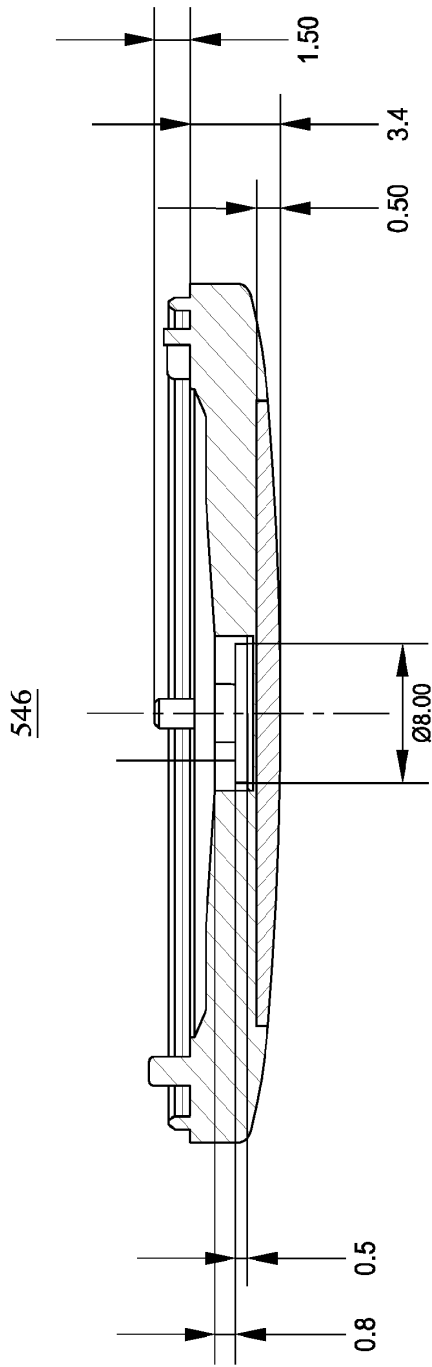


Fig. 54

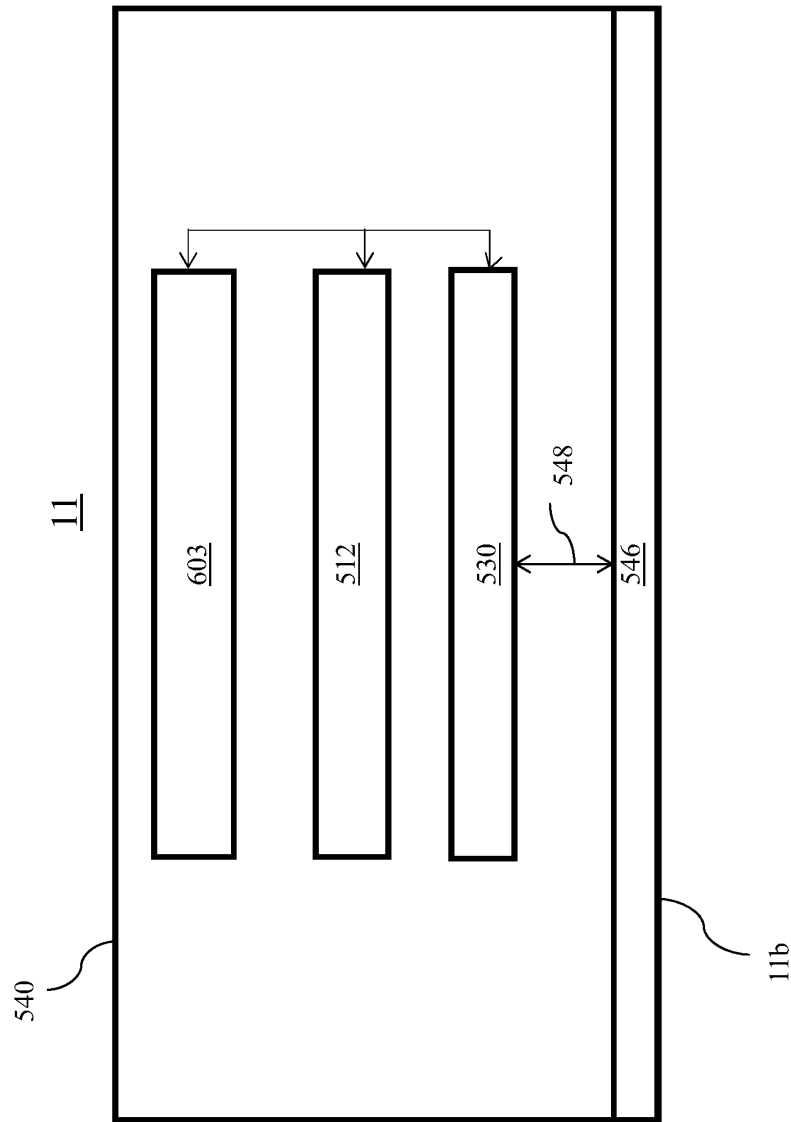


Fig. 55

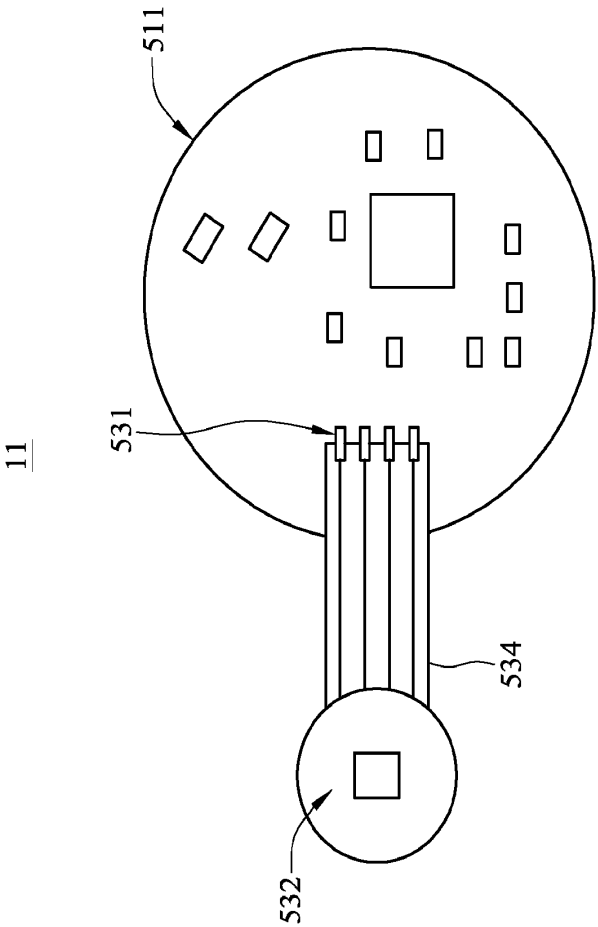


Fig. 56

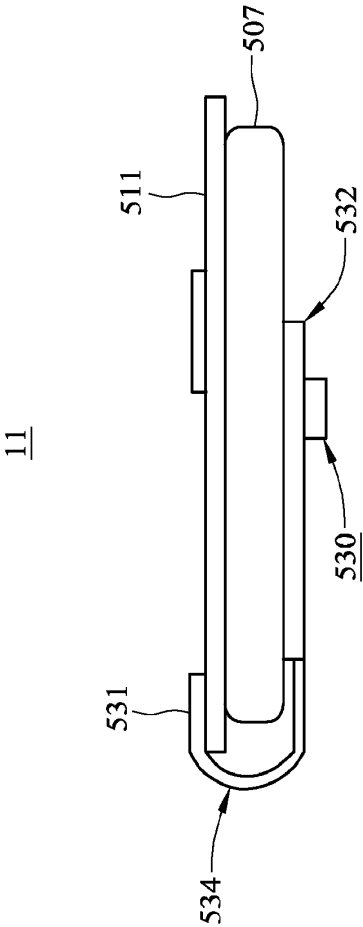


Fig. 57

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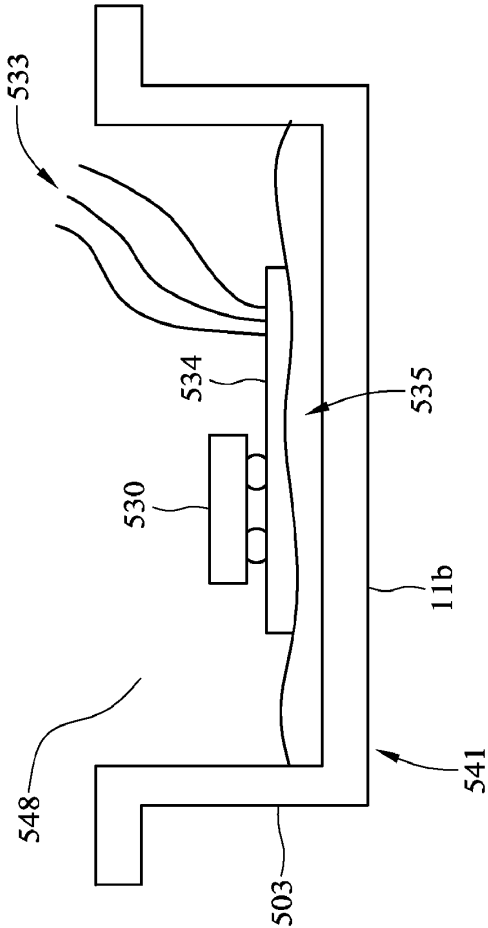


Fig. 58

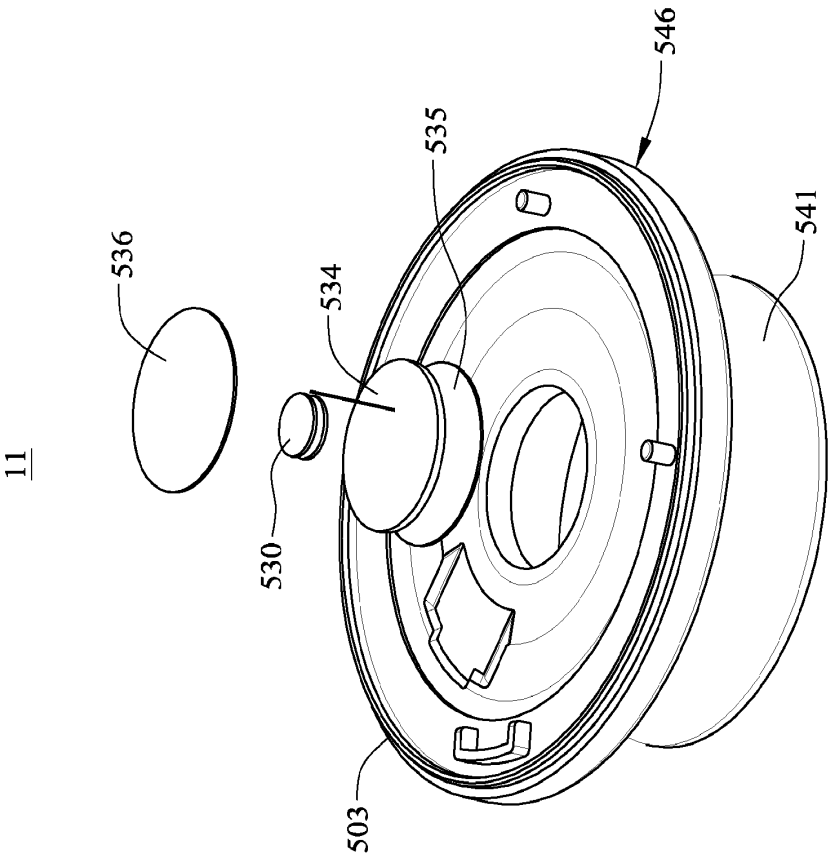


Fig. 59

550

			RSSI byte (high to low bits)									
			Payload select					Payload Params				
Function Name	Priority	Interval	7	6	5	4	3	2	1	0		
Events	1	Event Dependent	x	0	1	1	x	Low Battery	Free Fall	Not Used		
Battery	2	3 secs	x	0	0	1		4-bit Battery Status (look up table)				
RSSI Cal	3	3 Hz	x	0	0	0		4-bit RSSI Cal (look up table)				
Temp. Data (Lower Nibble)	4	10 secs	x	0	1	0		4-bit lower nibble				
Temp. Data (Higher Nibble)	4	10 secs	x	1	1	0		4-bit higher nibble				
Do not use	X	X	1	1	0	1	1	0	0	0	0	

Fig. 60

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Integrated Circuit Name	Option 1	Option 2	Option 3	Option 4
Temperature Range	0 to +50°C range	-40 to +125°C range	-50 to +150°C range	-55 to +150°C range
Accuracy	0.1°C	0.1°C to 1°C	-	±0.36°C
Power Consumption	600µA	0.2 µA @ 1 Hz	-	12 µA
Interface	I2C	I2C	Thermocouple (Analog)	Analog
Package	3 x 3 mm	3 x 3 mm	2 x 2 mm	0.912 x 0.912 mm
Supply Range	2.7V to 3.3V	1.9 to 3.6V	-	2.0 to 5.5V

Fig. 61

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Integrated Circuit Name	Option 2	Option 5	Option 1	Option 4
Temperature Accuracy	±0.1°C (36-41°C)	±1.0°C	±0.1°C (37-39°C)	±0.1°C (20-42°C)
VDD (V)	1.9 -3.6	1.8	2.7 -3.3	2 -5.5
Interface	I ² C	I ² C	I ² C	Analog
Power Consumption Standby	60 nano Amp	50 nano Amp	1650 nano Amp	
Power Consumption Operating	0.2 µA @ 1Hz	0.2 µA @ 1Hz	600 µA (Typical)	12 µA (Typical)
Package	3mm x 3mm DFN	2mm x 2mm QFN	3mm x 3mm TDFN	1mm x 1mm WLCSP

Price and Lead Time			
Advantages	1. Low Power Consumption 2. High Accuracy - used to measure human body Temperature 3. Digital I ² C 4. Exceeds ⁽¹⁾ ASTME1112	1. Very Low Power Consumption 2. Digital I ² C 3. Exceeds ⁽¹⁾ ASTME1112	1. Accurate body temperature measurement 2. Digital I ² C 3. Smallest form factor
Disadvantages	1. Higher Cost due to its high accuracy	1. Lower temperature accuracy	1. Higher power consumption 2. Needs external Microcontroller

(1)ASTME1112 Standard - Standard Specification for Electronics Patient Thermometers

Fig. 62

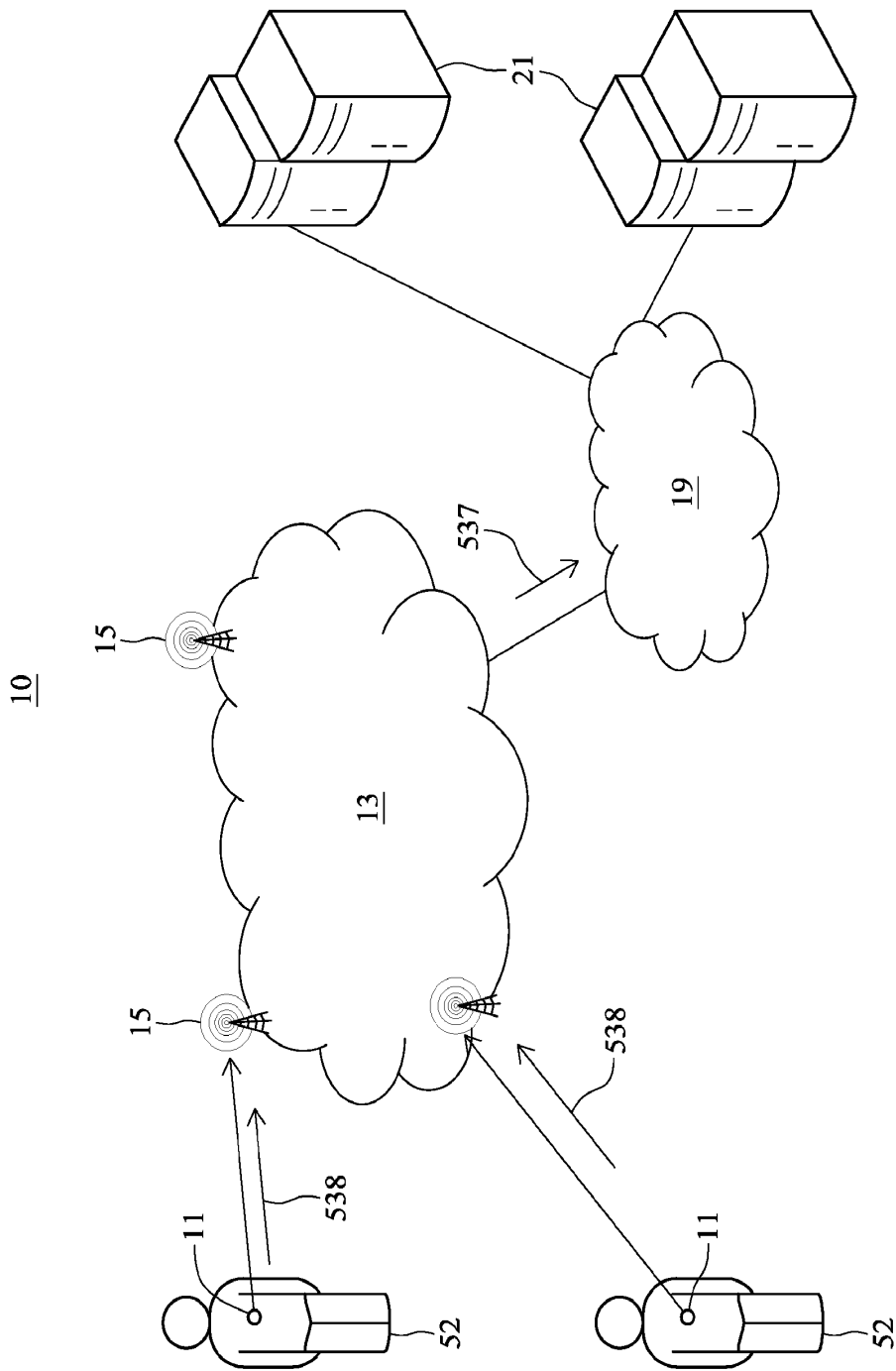


Fig. 63

580

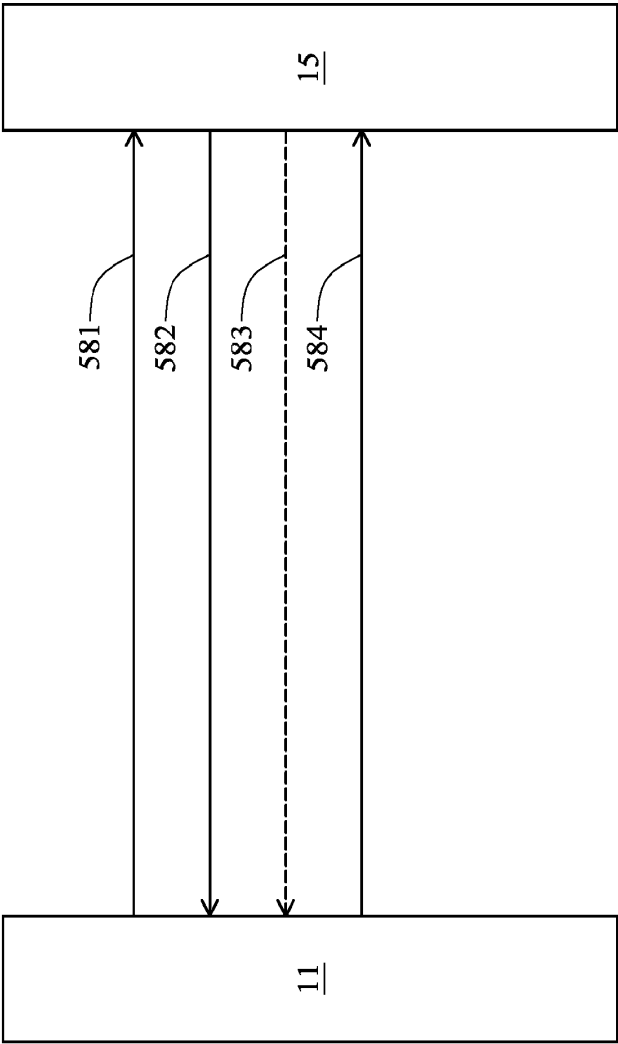


Fig. 64

560

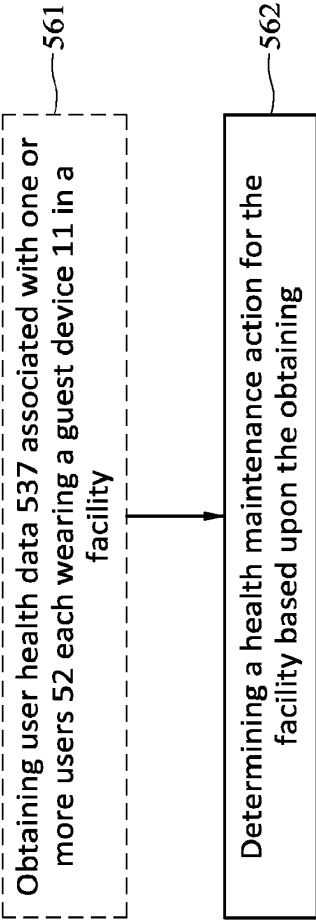


Fig. 65

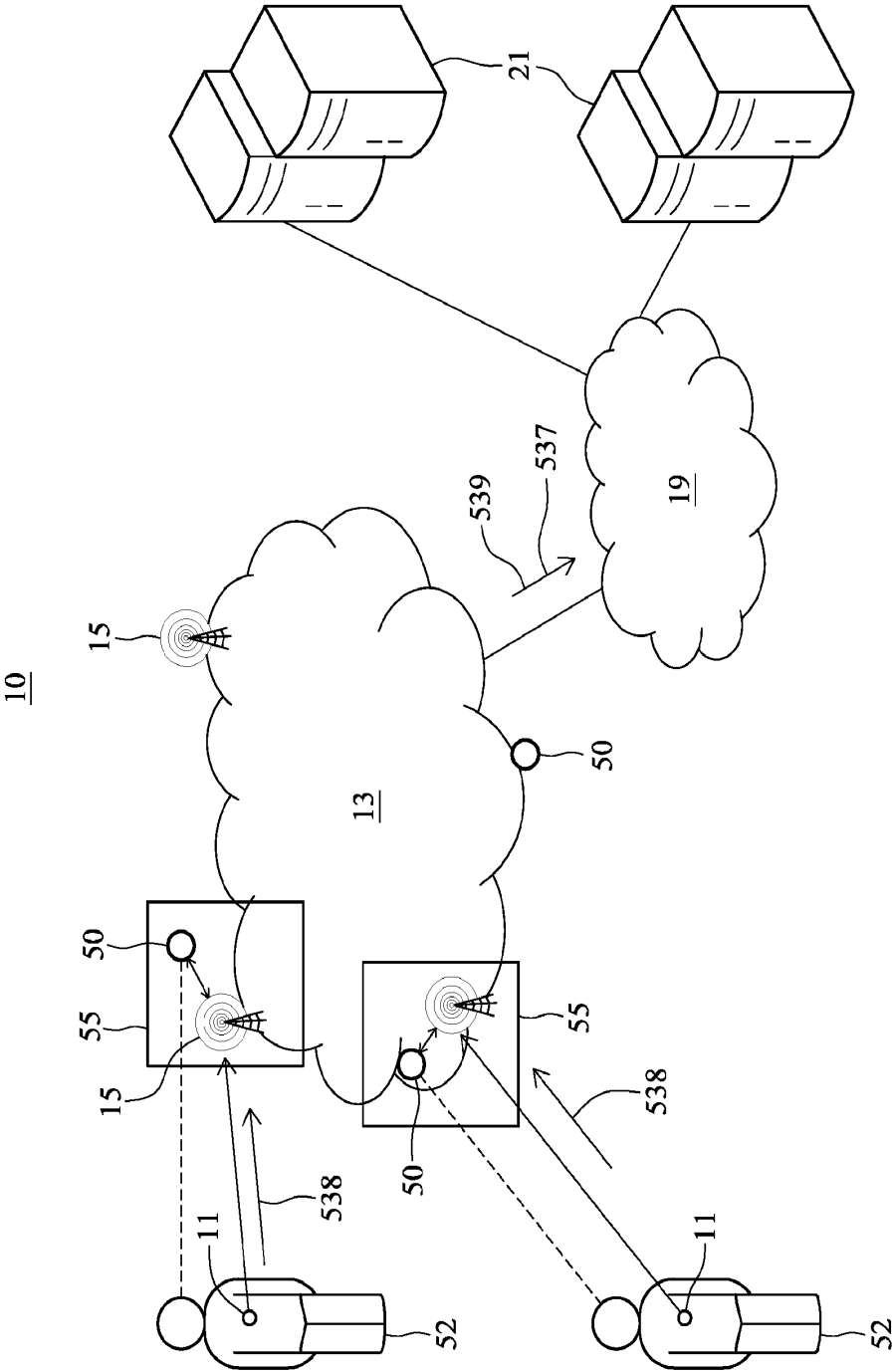
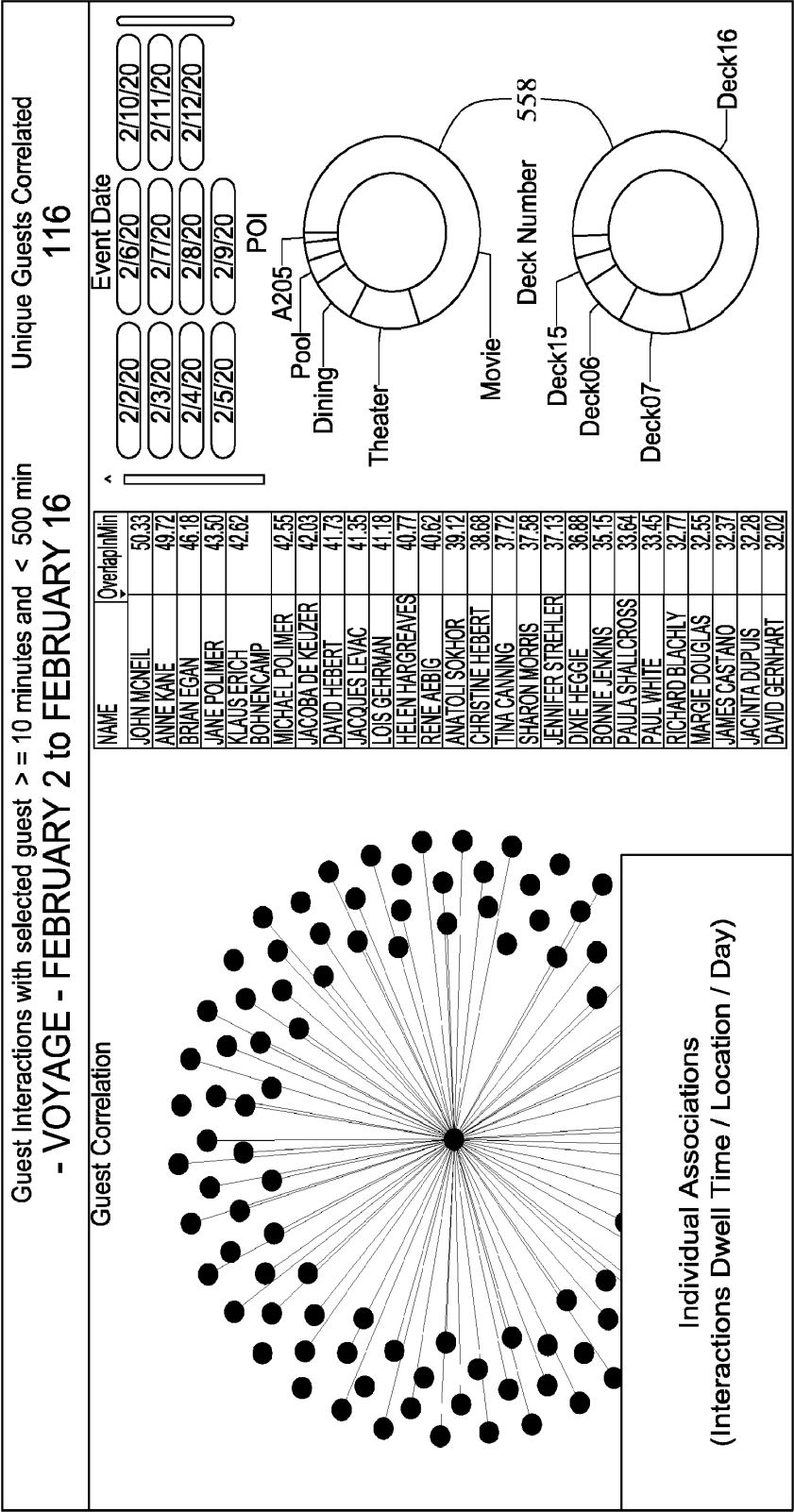


Fig. 66

554



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VOYAGE - FEBRUARY 2 to FEBRUARY 13

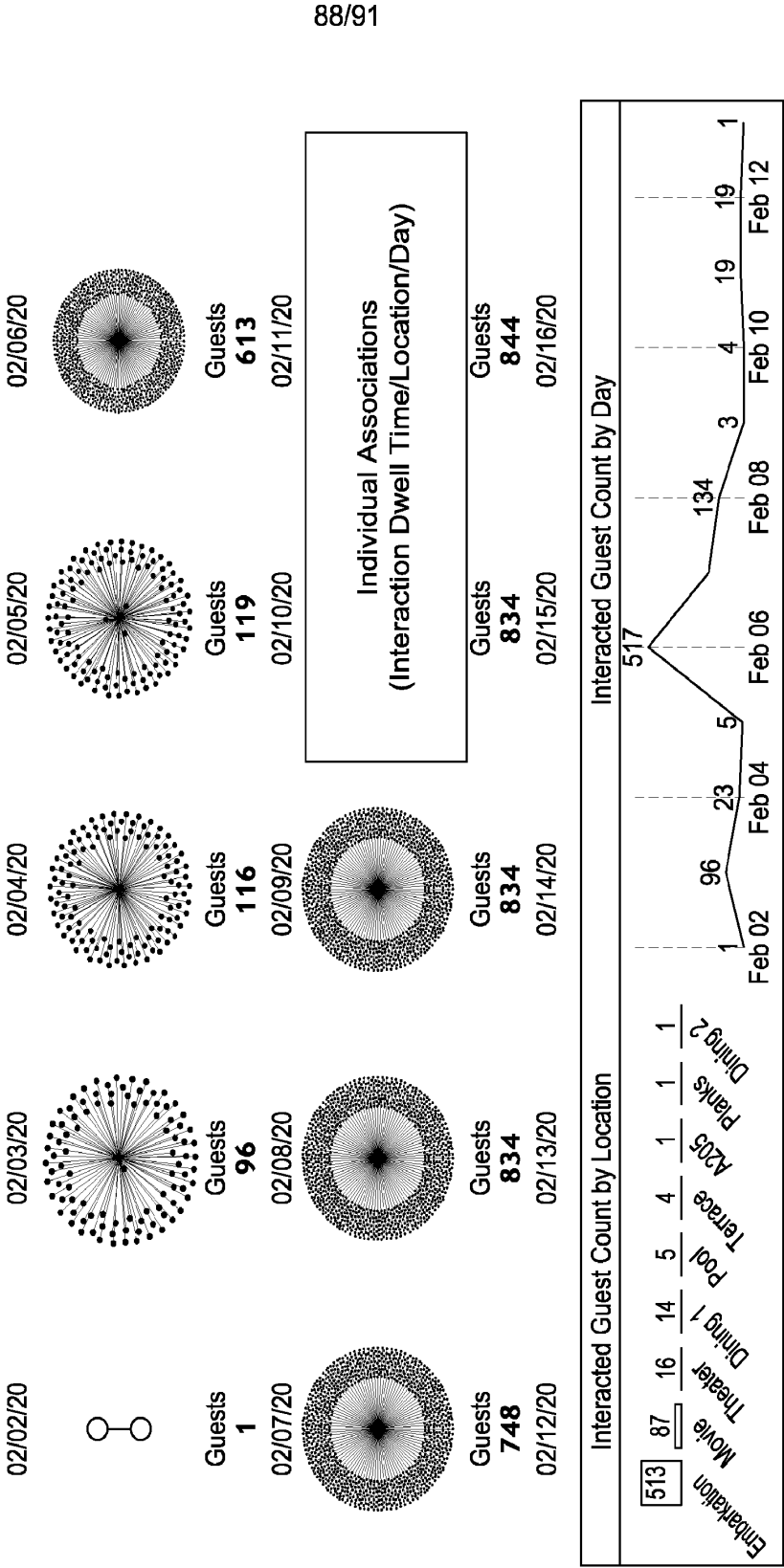


Fig. 68

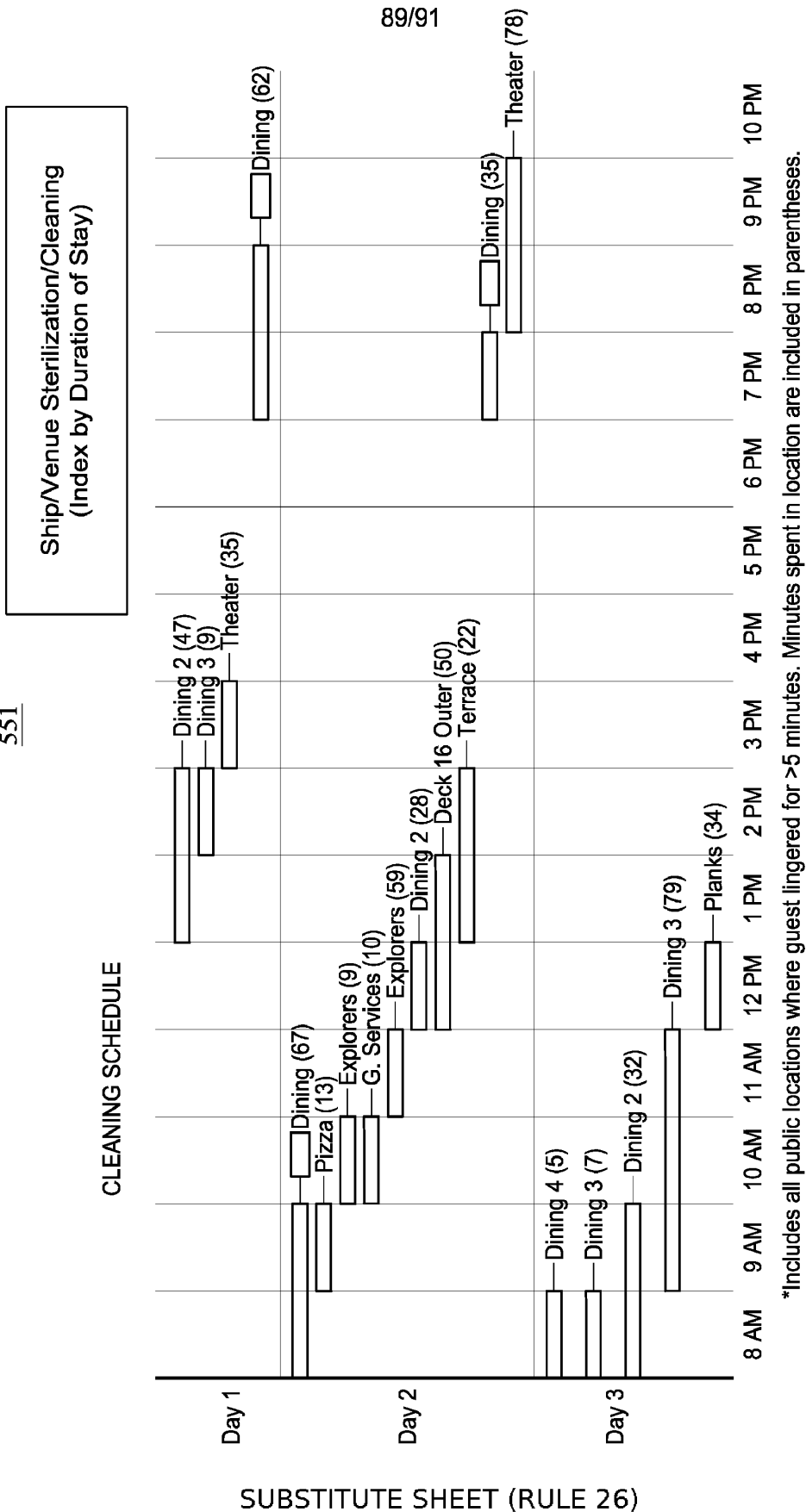


Fig. 69

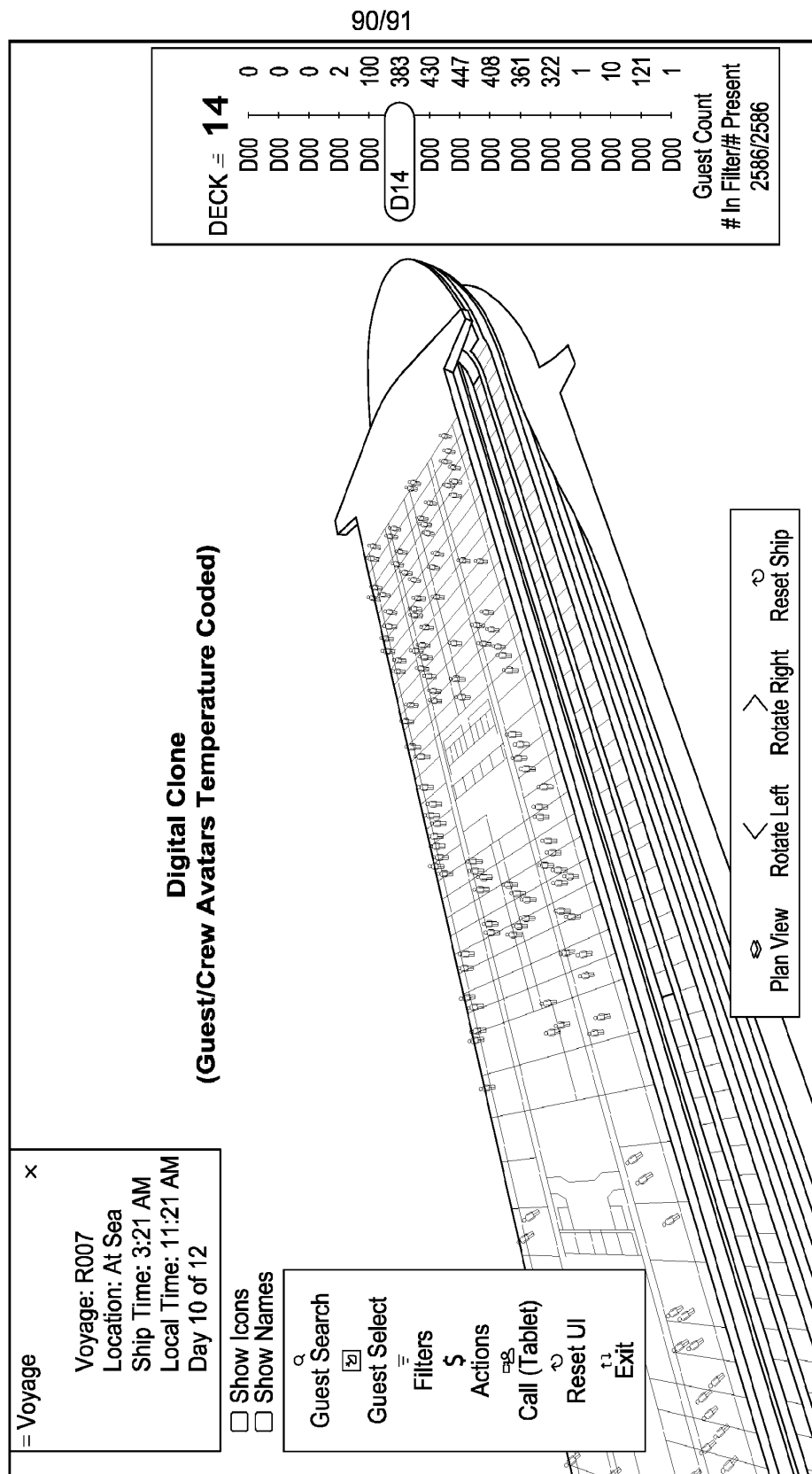


Fig. 70

